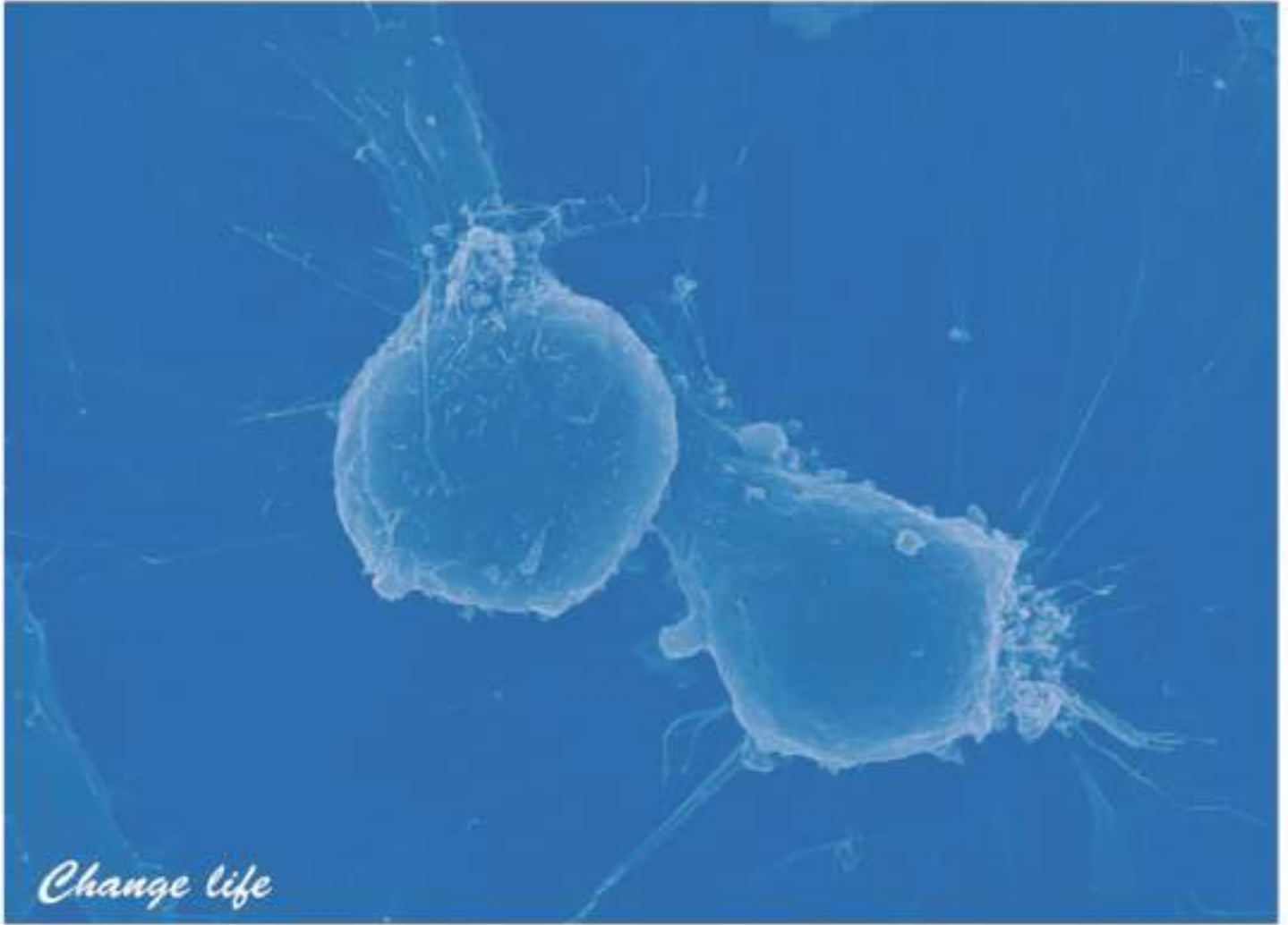


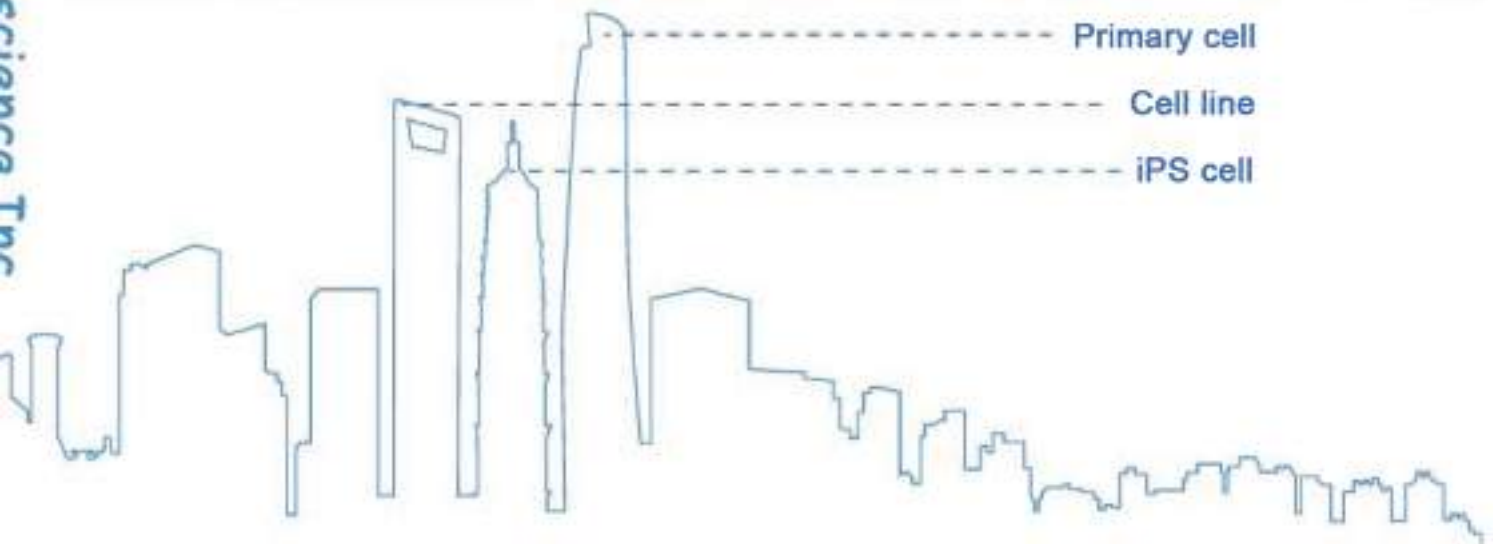


iCell Bioscience Inc
The World Cell Factory



Change life

iCell Bioscience Inc



Primary cell

Cell line

iPS cell

If the 20th century was the era of drug treatment,

Then 21st century is the era of cell therapy.

———— *George Q. Daley, M.D., Ph.D.*



———— Be a leader in China's cell industry and era



About us

iCell Bioscience Inc. was established in 2014, located at 2nd Floor, Building 3, Yindu Road No. 466, Juke Biopark, Xuhui District, Shanghai. It is a comprehensive biotechnology company supplemented by primary cells, stem cells and cell lines. The main business covers the establishment, cultivation and provision of primary cells, cell lines, iPS construction, and related CRO and CMO services. It also provides related culture systems, media, and other reagents for customers. iCell strives to become the world's cell culture factory, providing the best quality cells and the most complete services to all customers in need.



Product transportation, storage and use

Product transportation and storage:

The company chose one of the following methods after reaching a consensus with customers depending on weather conditions and the transportation distance.

1) 1ml of cryopreserved cell suspension is loaded in a 1.8ml cryovial and transported in a dry ice filled foam incubator. Cells should be thawed as soon as possible upon receiving. If it is impossible to initiating the culture immediately, the cryopreserved cells can be stored at -80°C for 1 month.

2) T-25 culture flask will be shipped at room temperature after being filled with complete culture medium. Please observe the growth of the cells under microscope upon receiving. Subculture at once when the culture reaches above 85% confluence. For the adherent cells, if the suspension cells keep growing, place the flask into the incubator for overnight stationary culture, which can help the living suspension cells to grow adhering to the wall once again.

Product use:

- 1) For research use only
- 2) It is not approved for human or animal use
- 3) It is not approved for application in in vitro diagnostic procedures

Our vision:

Committed to becoming the world's largest company with primary cell production, cell technology research service and cell application treatment platform.

Within a decade, the era of drugs is coming to an end. The Internet age has also entered the ages, and the biotechnology era has come one after another. In future, the life of each of us will be influenced by the cells; Everybody talk about the life science, health, cells and genes.

These cells will all be provided by us and we will be the pioneers and leaders of this new era. Imagine that the microscopic cellular universe and the macroscopic universe are so similar. However, the bigger the macro universe is, the more we understand and more simple for us. The microscopic cellular universe is different...

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Experimental Animals (Rat, Mouse, Rabbit, Pig) Primary Pulmonary Microvascular Endothelial Cells

CAT No: RAT/MIC/RAB/PIG-iCEL-a001

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD429/429/471/528

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

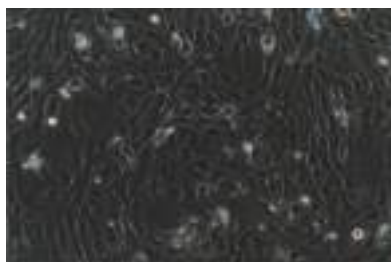
Pulmonary microvascular endothelial cells constitute a semi-selective barrier that plays an important role in lung gas exchange and in regulating the flow of liquids and solubles between the blood and lung interstitium. It also has metabolic functions that can perform certain non-respiratory functions. In lung injury, pulmonary microvascular endothelial cells are one of the important target cells of reactive oxygen species. In the process of the development of pneumonia, the neurohumoral medium and oxidizing agents act on the endothelial cells, increasing the intercellular permeability, and the protein enters the stroma from the blood. Increased intercellular permeability leads to hypoxemia, adult respiratory distress syndrome and non-cardiogenic pulmonary edema.

Product characteristics:

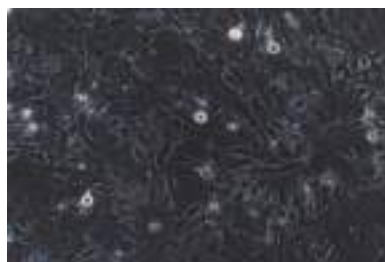
- 1) Isolated from the normal experimental animals lung tissue.
- 2) Cell identification: vWF immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Epithelioid cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Endothelial Cell Culture System (Cat No: PriMed-iCELL-002) for the culturing of Primary Pulmonary Microvascular Endothelial Cells in vitro.



RAT



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Pulmonary Artery Endothelial Cells

CAT No: RAT/MIC/RAB-iCELL-a002

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD515/515/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Pulmonary artery vascular endothelial cells are a multifunctional cell, especially for the non-respiratory function of the lungs. When it is damaged, pulmonary vascular permeability leads to pulmonary edema, which is of great significance in the mechanism of adult respiratory distress syndrome. However, in a complex environment in which multiple factors interact together, it is difficult to conduct an in-depth study on the function and metabolism of pulmonary vascular endothelial cells and the pathogenesis of lesions. In vitro culture systems of primary pulmonary endothelial cells help to study the function of pulmonary vascular endothelial cells under specific in vitro conditions.

Product characteristics:

- 1) Isolated from the normal pulmonary artery tissue of experimental animals.
- 2) Cell identification: vWF immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Epithelioid, polygonal cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Endothelial Cell Culture System (Cat No: PriMed-iCELL-002) for the culturing of Primary Pulmonary Artery Endothelial Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Pulmonary Artery Smooth Muscle Cells

CAT No: RAT/MIC/RAB-iCELL-a003

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD449/448/497

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The pulmonary artery originates from the right ventricle and slanted to the left upper rear before the aorta. The left and right pulmonary arteries are divided under the aortic arch and enter the lung through the hilar. Since the pulmonary artery is connected to the right ventricle that delivers venous blood, although the pulmonary artery is an artery, but it delivers venous blood. Vascular smooth muscle cells are connected to each other to form a tubular structure; functionally, continuous contraction can be produced to maintain the original shape against the applied load.

The cells expressed on the surface of the calcium channel expressed ICAM-1 and VCAM-1, which are involved in the vascular wall inflammatory response. The pulmonary aortic smooth muscle cells cultured in vitro are fusiform, star-shaped or irregular.

Product characteristics:

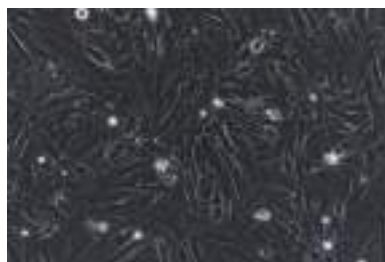
- 1) Isolated from the normal pulmonary artery tissue of experimental animals.
- 2) Cell identification: α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification..
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Smooth Muscle Cell Culture System (Cat No: PriMed-iCELL-004) for the culturing of Primary Pulmonary Artery Endothelial Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Pulmonary Artery Adventitial Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCELL-a004

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD451/446/497

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The pulmonary artery is composed of the inner membrane, the middle elastic layer and the outer membrane, and the three layers are closely attached together. Among them, the outer membrane is a specialized supporting tissue, and the outer membrane fibrils are the main components of the outer membrane, which play an important role in vascular inflammation and vascular remodeling.

Product characteristics:

- 1) Isolated from the normal pulmonary artery tissue of experimental animals.
- 2) Cell identification: Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification..
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle,irregular cells,adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblasts Culture System(Cat No: PriMed-iCELL-003) for the culturing of Primary Pulmonary Artery Adventitial Fibroblasts Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary II Alveolar Epithelial Cells

CAT No: RAT/MIC/RAB-iCell-a005

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD517/522/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Alveolar tissue is the largest surface exposed to the external environment. The mammalian lung is composed of more than 40 different types of cells which composed II Alveolar Epithelial Cells. II Alveolar Epithelial Cells are small, cuboidal cells with small cell bodies and round circles, accounting for about 60% of epithelial cells. It accounts for about 15% of all lung cells, but only covers 5% of the alveolar surface. It is between small endothelium and interstitial cells, large macrophages and type I cells.

Product characteristics:

- 1) Isolated from the normal lung tissue of experimental animals.
- 2) Cell identification: SP-A immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification..
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Pulmonary Artery Endothelial Cells in vitro.



MIC



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Tracheal Epithelial Cells

CAT No: RAT/MIC/RAB-iCELL-a006

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD429/429/483

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The trachea is composed of cartilage, muscle, connective tissue, and mucous membranes. Cartilage is a "C"-shaped cartilaginous ring with a notch posteriorly. Each cartilage ring is connected with a ligament. The gap behind the ring is connected by smooth muscle and dense connective tissue, and maintains a continuous open state. On the epithelial surface of the proximal lower respiratory tract, mainly ciliated epithelial cells, which together with basal cells and goblet cells constitute a pseudostratified epithelium, most of the cells reaching the surface of the tracheal cavity are ciliated epithelial cells, basal cells are connected to the basement membrane and fixed to the epithelium by hemides. In the distal lower respiratory tract, Clara cells and basal cells predominate, ciliated cells are absent, the number of goblet cells is reduced, the epithelial morphology is more like columnar, and the entire epithelium is present in a thin basement membrane. Above, the reticular layers composed of interstitial connective tissue support each other, and other connective tissues and fibroblasts exist under the epithelium..

Product characteristics:

- 1) Isolated from the normal bronchial tissue of experimental animals.
- 2) Cell identification: PCK immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification..
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Tracheal Epithelial Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Tracheal Smooth Muscle Cells

CAT No: RAT/MIC/RAB-iCell-a007

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD378/377/429

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Asthma is a common chronic inflammatory disease of the airways. At present, about 20 million people suffer from asthma in China. In recent years, due to the increasingly poor air quality and environmental pollution such as smog, respiratory diseases have gradually become one of the most serious chronic diseases affecting human health worldwide. According to the World Health Organization, by 2025, the world will be 400 million people suffering from asthma. There are many symptoms of asthma, early manifestations of allergic inflammation, late due to tracheal smooth muscle hyperplasia, obstruction of the trachea, leading to airway stenosis, airway hyperresponsiveness and airway remodeling, patients with chest tightness, asthma and other symptoms, serious life-threatening. Therefore, research on the pathogenesis and treatment of asthma is crucial. In the study of the pathogenesis of asthma, tracheal smooth muscle is one of the main research targets for airway obstructive symptoms. Morphological observation of airway smooth muscle cells (ASMCs) and measurement of cell proliferation rate are common methods for studying the pathogenesis of asthma at the level of cell biology.

Product characteristics:

- 1) Isolated from the normal tracheal tissue of experimental animals.
- 2) Cell identification: α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Smooth Muscle Cell Culture System (Cat No: PriMed-iCELL-004) for the culturing of Primary Tracheal Smooth Muscle Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Bronchial Epithelial Cells

CAT No: RAT/MIC/RAB-iCell-a008

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/518

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The trachea is composed of cartilage, muscle, connective tissue, and mucous membranes. Cartilage is a "C"-shaped cartilaginous ring with a notch posteriorly. Each cartilage ring is connected with a ligament. The gap behind the ring is connected by smooth muscle and dense connective tissue, and maintains a continuous open state.

The bronchi refers to the branches divided by the trachea, the first bronchus separated by the trachea, namely the left and right main bronchus.

The tracheal wall is divided into mucosa, submucosa and adventitia.

The surface of mucosal is a pseudostratified ciliated columnar epithelium composed of cilia cells, goblet cells, basal cells, brush cells, and diffuse neuroendocrine cells.

Product characteristics:

- 1) Isolated from the normal bronchial tissue of experimental animals.
- 2) Cell identification: PCK immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Bronchial Epithelial Cells in vitro.



MIC



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Bronchial Smooth Muscle Cells

CAT No: RAT/MIC/RAB-iCELL-a009

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD413/411/463

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The smooth muscle is the generic term for the unstriated muscle, which is composed of mononuclear cells with long spindles. It does not constitute an independent organ, but only a factor (muscle layer) that constitutes the body wall and the visceral wall. Smooth muscle cells are connected to each other to form a tubular structure or a hollow organ; The organ can be moved and deformed by shortening and generating tension, and can also produce continuous contraction or tension contraction, so that the organ maintains its original shape against the applied load..

The contraction, relaxation, proliferation and apoptosis of bronchial smooth muscle cells are related to the pathophysiological processes of many clinical diseases. Such as bronchial asthma, chronic obstructive pulmonary disease and so on. For example, in the onset of asthma, hyperplasia and hypertrophy of the tracheal smooth muscle can be detected., the phenotype also changed, from contractile to synthetic and secretory, and secreted multiple and cytokines; and signs of migration to the tracheal cavity, and there are signs of migration to the trachea.

Product characteristics

- 1) Isolated from the normal bronchial tissue of experimental animals.
- 2) Cell identification: α -SM immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Smooth Muscle Cell Culture System (Cat No: PriMed-iCELL-004) for the culturing of Primary Bronchial Smooth Muscle Cells in vitro.



MIC



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Pulmonary Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCELL-a010

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD382/378/429

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Fibroblasts are the most abundant cell types in the interstitial lung. These fibroblasts are similar to the common ones, but have their own unique features, such as long pseudopodia and intercellular gap junctions. The main function of lung fibroblasts is to secrete type III collagen, elastin and proteoglycan in the alveolar septum, and also play an important role in repair and reconstruction of the lungs. After a lung injury, a certain degree of fibroblast accumulation at the site of inflammation is a critical step in lung recovery, and excessive or insufficient accumulation of fibroblasts can lead to abnormal lung function..

Product characteristics:

- 1) Isolated from the normal lung tissue of experimental animals.
- 2) Cell identification: Fibronectin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblasts Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Pulmonary Fibroblasts Cells in vitro.



MIC



PIG

Experimental Animal (Rat, Mouse, Rabbit) Primary Pulmonary Macrophages Cells

CAT No: RAT/MIC/RAB-iCELL-a011

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD414/414/463

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Pulmonary macrophages are differentiated from monocytes and are widely distributed in the interstitial lung, much more around the tubules below the bronchioles and in the alveolar septum. The phagocytosis, immunity and secretion of lung macrophages are very active and have important defense functions. Foreign matter such as dust particles and bacteria inhaled into the air enters the alveolar and interstitial lungs, and is mostly phagocytosed by macrophages. Therefore, dust particles, secondary lysosomes and phagosomes are common in the cytoplasm of the cells. Pulmonary macrophages can also phagocytose aging red blood cells. When pulmonary stagnation occurs in patients with heart failure, a large number of red blood cells overflow from the capillaries and are swallowed by macrophages. Macrophages that phagocytose foreign bodies, some are coughed out from the alveolar space through the mucus flow and ciliary movement of the respiratory tract, and some enter the lymphatic vessels of the lungs and enter the pulmonary lymph nodes with the lymph..

Product characteristics:

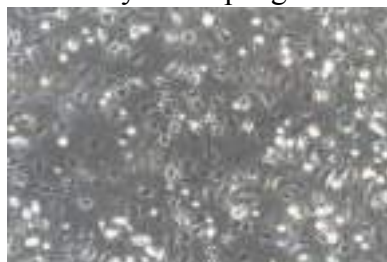
- 1) Isolated from the normal lung tissue of experimental animals.
- 2) Cell identification: CD68 and MAC387 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification..
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Round, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Macrophage Culture System(Cat No: PriMed-iCELL-011) for the culturing of Primary Pulmonary macrophages in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Pulmonary Microvascular Pericytes

CAT No: RAT/MIC/RAB-iCELL-a012

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/459/520

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Pulmonary microvascular pericytes are distributed in the microvasculature of lung tissue, key factors of regulating angiogenesis, stability, and function. Pericytes are typically characterized by a prominent nucleus with less cytoplasm around the nucleus and many protrusions parallel to the long axis of the microvessel, which taper and surround the microvascular lumen to support the lumen. At the same time, one pericyte can be contacted with multiple capillaries in the microcirculation through the extended projections. In addition, the interaction between pericytes and endothelial cells plays an extremely important role in angiogenesis.

Product characteristics:

- 1) Isolated from the normal lung tissue of experimental animals.
- 2) Cell identification: α -SM immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification..
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Peripheral Cell Culture System (Cat No: PriMed-iCELL-015) for the culturing of Primary Pulmonary Microvascular Pericytes in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Cardiac Muscle Cells

CAT No: RAT/MIC/RAB-iCell-c001

Size/Quantity: Each vial contains $>10^5$ cells in 1ml volume

Price: USD449/447/497

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The working cells of Myocardial include atrial and ventricular muscles. Myocardial cells are short columnar shape, and generally have only one nucleus. There is a septum structure between cardiomyocytes. The cell membranes are embedded in concave and convex shape, and they are specifically differentiated to form desmosomes, which are tightly connected to each other. However, there is no continuous continuum between the myocardial cells. The nucleus of cardiomyocytes is mostly in the middle of the cell, resembling an ellipse or a rectangle, and its major axis is in the same direction as myofibrils. Myofibrils travel around the nucleus. Both ends of the nucleus are rich in sarcoplasm, which have abundant glycogen granules and mitochondria, in meet the demand for continuous rhythmic contraction of the myocardium.

Product characteristics:

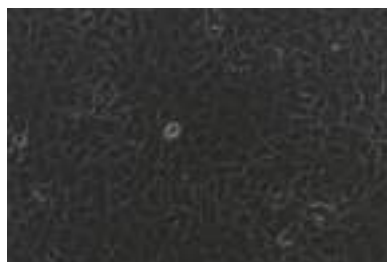
- 1) Isolated from the normal myocardial tissue of experimental animals.
- 2) Cell identification: MHC immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long columnar, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Cardiomyocyte Culture System (Cat No: PriMed-iCELL-022) for the culturing of Primary Cardiac Muscle Cells in vitro.



MIC



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Cardiac Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCell-c002

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD377/378/429

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The heart is the most important organ in the body of a vertebrate. Its main function is to provide pressure to run blood to all parts of the body. The role of the heart is to promote blood flow, provide sufficient blood flow to organs and tissues to supply oxygen and various nutrients, and take away metabolic end products (such as carbon dioxide, inorganic salts, urea and uric acid) to maintain cell the normal metabolism and function.

In the heart, cardiac fibroblasts cells account for 60%-70% of the total number of the normal myocardial cells. They are the main components of non-myocardial cells in the heart. They are widely distributed in cardiac tissues, surrounding cardiomyocytes, closely related to ischemic heart disease, inflammation, hypertrophy, infarction and other pathological conditions.

Product characteristics:

- 1) Isolated from the normal myocardial tissue of experimental animals.
- 2) Cell identification: Fibronectin and Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Cardiac Fibroblasts Cells in vitro.



RAT



PIG

Experimental Animal (Rat, Mouse, Rabbit) Primary Aortic Endothelial Cells

CAT No: RAT/MIC/RAB-iCELL-c003

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD515/463/515

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

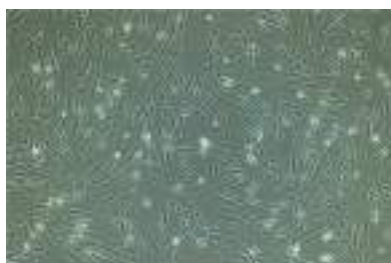
Rat aortic endothelial cells constitute the inner wall of the aorta and are continuously affected by blood flow shear stress. Endothelial cells secrete different endothelial factors under the action of shear stress and thus affect vasoconstriction and growth. Aortic endothelial cells also regulate the expression of cell adhesion molecules to control and precisely regulate inflammatory responses and tissue fibrosis. Primary aortic endothelial cells cultured in vitro can effectively help researchers study the mechanism of endothelial dysfunction, the pathogenesis of diseases such as atherosclerosis, and the development of new treatments.

Product characteristics:

- 1) Isolated from the normal lung tissue of experimental animals.
- 2) Cell identification: PECAM-1/CD31 or vWF immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Epithelioid, polygonal cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Endothelial Cell Culture System (Cat No: PriMed-iCELL-002) for the culturing of Primary Aortic Endothelial Cells in vitro.



MIC



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Aortic Smooth Muscle Cells

CAT No: RAT/MIC/RAB-iCELL-c004

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD413/411/463

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

A major factor in the development and progression of vascular disease is the transformation of vascular smooth muscle cells (SMCs) into a reproductive phenotype. Recent studies have shown that smooth muscle cells express calcium channels, ICAM-1 and VCAM-1. The expression of ICAM-1 and VCAM-1 may be the cause of inflammation of the blood vessel wall and further cause vascular disease. Therefore, in vitro culture and study of vascular smooth muscle cells can be used to identify targeted therapeutic approaches for new vascular diseases.

Product characteristics:

- 1) Isolated from the normal aortic tissue of experimental animals.
- 2) Cell identification: α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Smooth Muscle Cell Culture System (Cat No: PriMed-iCELL-004) for the culturing of Primary Aortic Smooth Muscle Cells in vitro.



RAT



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Aortic Adventitial Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCELL-c005

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD411/411/463

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The aorta is composed of the inner membrane, the middle elastic layer and the outer membrane, and the three layers are closely attached together. Among them, the outer membrane is a specialized supporting tissue, and the outer membrane fibrils are the main components of the outer membrane, which play an important role in vascular inflammation and vascular remodeling.

Product characteristics:

- 1) Isolated from the normal aortic tissue of experimental animals.
- 2) Cell identification: Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblasts Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Aortic Adventitial Fibroblasts Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Coronary Endothelial Cells

CAT No: RAT/MIC/RAB-iCELL-c006

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD583/583/634

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The endothelial cell layer is a natural barrier to blood and other tissues. Endothelial cell functional lesions are the leading cause of atherosclerosis. Endothelial cells simultaneously synthesize and secrete enhancers and inhibitors of coagulation and fibrinolytic systems, as well as vehicles that affect platelet adhesion and aggregation. They also secrete proteins that control cell proliferation to maintain the health of the blood vessel wall. Human endothelial cells secrete anti-thrombotic factors such as t-PA and PAI-1 as well as TNF- α , which in turn secretes the cytokine GM-CSF, which expresses ICAM-1 surface antibodies, producing large amounts of nitric oxide and endothelin. Endothelial cell damage and functional disruption caused by percutaneous transluminal coronary angioplasty (PTCA) may be an important cause of postoperative arterial restenosis.

Product characteristics:

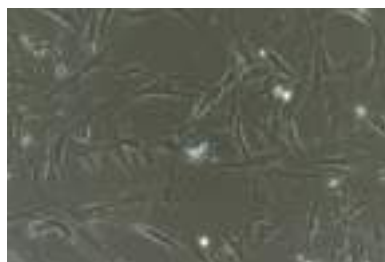
- 1) Isolated from the normal coronary tissue of experimental animals.
- 2) Cell identification: vWF immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Epithelioid, oligonal cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Endothelial Cell Culture System (Cat No: PriMed-iCELL-002) for the culturing of Primary Coronary Endothelial Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Coronary Smooth Muscle Cells

CAT No: RAT/MIC/RAB-iCELL-c007

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD531/531/587

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The coronary artery is an artery that supplies blood to the heart. It originates from the root of the aorta and is divided into two branches on the surface of the heart. A major factor in the development and progression of coronary artery disease is the transformation of vascular smooth muscle cells into a reproductive phenotype. Recent studies have shown that smooth muscle cells express calcium channels, ICAM-1 and VCAM-1. The expression of ICAM-1 and VCAM-1 may be the cause of inflammation of the blood vessel wall and further cause vascular disease. Therefore, in vitro culture and study of coronary vascular smooth muscle cells can be used to identify novel therapeutic approaches for coronary vascular disease.

Product characteristics:

- 1) Isolated from the normal heart tissue of experimental animals.
- 2) Cell identification: α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Smooth Muscle Cell Culture System (Cat No: PriMed-iCELL-004) for the culturing of Primary Coronary Smooth Muscle Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Carotid Endothelial Cells

CAT No: RAT/MIC/RAB-iCELL-c008

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD514/514/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The carotid artery is present in the arteries of the vertebrate neck. There are external carotid artery and internal carotid artery. The former is distributed to the top of the head and the face, and the latter is distributed into the brain and eyelids.

The endothelial cell layer is a natural barrier to blood and other tissues. Endothelial cell functional lesions are the leading cause of atherosclerosis. Endothelial cells simultaneously synthesize and secrete enhancers and inhibitors of coagulation and fibrinolytic systems, as well as vehicles that affect platelet adhesion and aggregation. They also secrete proteins that control cell proliferation to maintain the health of the blood vessel wall. Endothelial cells secrete anti-thrombotic factors such as t-PA and PAI-1 as well as TNF- α , which in turn secretes the cytokine GM-CSF, which expresses ICAM-1 surface antibodies, producing large amounts of nitric oxide and endothelin. In vitro culture systems of primary arterial endothelial cells help to study the function of vascular endothelial cells under specific in vitro conditions.

Product characteristics:

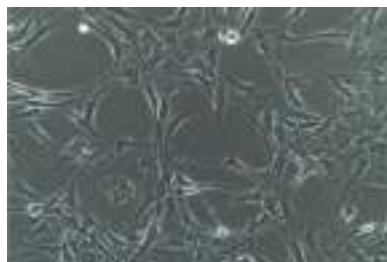
- 1) Isolated from the normal coronary tissue of experimental animals.
- 2) Cell identification: PECAM-1/CD31 or vWF immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Epithelioid, polygonal cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Endothelial Cell Culture System (Cat No: PriMed-iCELL-002) for the culturing of Primary Carotid Endothelial Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Carotid Smooth Muscle Cells

CAT No: RAT/MIC/RAB-iCELL-c009

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/515

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The carotid artery is present in the arteries of the vertebrate neck. There are external carotid artery and internal carotid artery. The former is distributed to the top of the head and the face, and the latter is distributed into the brain and eyelids. A major cause of vascular disease is the transformation of vascular smooth muscle cells into a reproductive phenotype. Therefore, in vitro culture and study of arterial vascular smooth muscle cells can be used to identify targeted therapeutic approaches for new vascular diseases.

Product characteristics:

- 1) Isolated from the normal carotid tissue of experimental animals.
- 2) Cell identification: α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Smooth Muscle Cell Culture System (Cat No: PriMed-iCELL-004) for the culturing of Primary Carotid Smooth Muscle Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Abdominal Aortic Endothelial Cells

CAT No: RAT/MIC/RAB-iCELL-c010

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/523

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

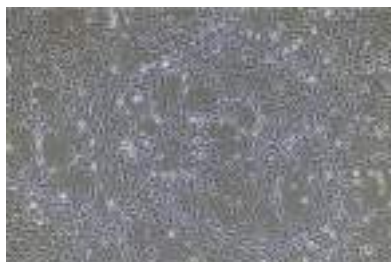
The abdominal aorta is the aorta of the human body. It directly extends from the aorta from the left ventricle. The thoracic aorta descends along the left side of the spine and is mainly responsible for the blood supply to the abdominal organs and abdominal wall. Abdominal Aortic Endothelial Cells constitute the inner wall of the aorta and are continuously affected by the shear stress of blood flow. Endothelial cells secrete different endothelial factors under the action of shear stress and thus affect vasoconstriction and growth. Aortic endothelial cells also regulate the expression of cell adhesion molecules to control and precisely regulate inflammatory responses and tissue fibrosis. Primary aortic endothelial cells cultured in vitro can effectively help researchers study the mechanism of endothelial dysfunction, the pathogenesis of diseases such as atherosclerosis, and the development of new treatments.

Product characteristics:

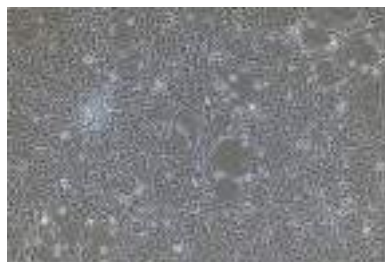
- 1) Isolated from the normal abdominal aortic tissue of experimental animals.
- 2) Cell identification: PECAM-1/CD31 or vWF immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone cells, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Endothelial Cell Culture System (Cat No: PriMed-iCELL-002) for the culturing of Primary Abdominal Aortic Endothelial Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Abdominal Aortic Smooth Muscle Cells

CAT No: RAT/MIC/RAB-iCELL-c011

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD411/411/474

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The abdominal aorta is the aorta of the human body. It directly extends from the aorta from the left ventricle. The thoracic aorta descends along the left side of the spine and is mainly responsible for the blood supply to the abdominal organs and abdominal wall. A major cause of arterial disease is the transformation of vascular smooth muscle cells into a reproductive phenotype. Recent studies have shown that smooth muscle cells express calcium channels, ICAM-1 and VCAM-1. The expression of ICAM-1 and VCAM-1 may be the cause of inflammation of the blood vessel wall and further cause vascular disease. Therefore, in vitro culture and study of arterial vascular smooth muscle cells can be used to identify targeted therapeutic approaches for new vascular diseases.

Product characteristics:

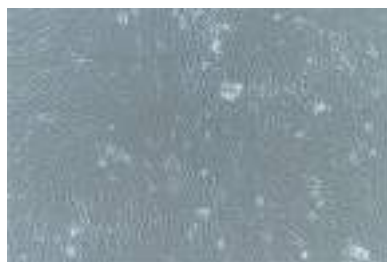
- 1) Isolated from the normal abdominal aortic tissue of experimental animals.
- 2) Cell identification: α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Smooth Muscle Cell Culture System (Cat No: PriMed-iCELL-004) for the culturing of Primary Abdominal Aortic Smooth Muscle Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Abdominal Aortic Adventitial Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCELL-c012

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD411/411/463

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The abdominal aorta is the aorta of the human body. It directly extends from the aorta from the left ventricle. The thoracic aorta descends along the left side of the spine and is mainly responsible for the blood supply to the abdominal organs and abdominal wall. The artery is composed of the inner membrane, the middle elastic layer and the outer membrane, and the three layers are closely attached together. Among them, the outer membrane is a specialized supporting tissue, and the outer membrane fibrils are the main components of the outer membrane, which play an important role in vascular inflammation and vascular remodeling.

Product characteristics:

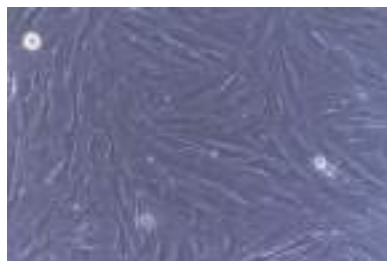
- 1) Isolated from the normal aortic tissue of experimental animals.
- 2) Cell identification: Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Abdominal Aortic Adventitial Fibroblasts Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Femoral Artery Endothelial Cells

CAT No: RAT/MIC/RAB-iCELL-c013

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD514/505/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The femoral artery is the backbone of the lower extremity arteries and continues from the external iliac artery. A deep triangle in the midpoint of the inguinal ligament. In the femoral triangle, the femoral artery is located on the outside of the femoral vein, gradually extending from the lateral side to the front of the femoral vein, descending into the myotube, and then through the muscle spasm to the axillary fossa. The position of the femoral artery at the midpoint of the inguinal region is superficial, and it can be touched. It is the site of clinical emergency pressure to stop bleeding and puncture. The femoral artery endothelial cells constitute the inner wall of the artery and are continuously affected by the shear stress of the blood flow. Endothelial cells secrete different endothelial factors under the action of shear stress and thus affect vasoconstriction and growth. Aortic endothelial cells also regulate the expression of cell adhesion molecules to control and precisely regulate inflammatory responses and tissue fibrosis. Primary femoral artery endothelial cells cultured in vitro can effectively help researchers study the mechanism of endothelial dysfunction, the pathogenesis of diseases such as atheroma and the development of new treatment methods.

Product characteristics:

- 1) Isolated from the normal femoral artery tissue of experimental animals.
- 2) Cell identification: Vwf immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Endothelial Cell Culture System (Cat No: PriMed-iCELL-002) for the culturing of Primary Femoral Artery Endothelial Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Femoral Artery Smooth Muscle Cells

CAT No: RAT/MIC/RAB-iCELL-c014

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/514

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The femoral artery is the backbone of the lower extremity arteries and continues from the external iliac artery. A deep triangle in the midpoint of the inguinal ligament. In the femoral triangle, the femoral artery is located on the outside of the femoral vein, gradually extending from the lateral side to the front of the femoral vein, descending into the myotube, and then through the muscle spasm to the axillary fossa. The position of the femoral artery at the midpoint of the inguinal region is superficial, and it can be touched. It is the site of clinical emergency pressure to stop bleeding and puncture. The femoral artery endothelial cells constitute the inner wall of the artery and are continuously affected by the shear stress of the blood flow. Endothelial cells secrete different endothelial factors under the action of shear stress and thus affect vasoconstriction and growth. Aortic endothelial cells also regulate the expression of cell adhesion molecules to control and precisely regulate inflammatory responses and tissue fibrosis. Primary femoral artery endothelial cells cultured in vitro can effectively help researchers study the mechanism of endothelial dysfunction, the pathogenesis of diseases such as atheroma and the development of new treatment methods.

Product characteristics:

- 1) Isolated from the normal Femoral Artery tissue of experimental animals.
- 2) Cell identification: α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Smooth Muscle Cell Culture System (Cat No: PriMed-iCELL-004) for the culturing of Primary Femoral Artery Smooth Muscle Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Cardiac Stem Cells

CAT No: RAT/MIC/RAB-iCell-c015

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD497/494/554

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The heart acts as a terminally differentiated organ, but recent studies have confirmed that the heart contains regenerable cells, namely cardiac stem cells. Stem cell transplantation has received widespread attention as a new approach to the treatment of heart disease. In addition, stem cells derived from the same organ can avoid risks such as immune rejection caused by allogeneic stem cell transplantation. Cardiac stem cells mainly differentiate into cardiomyocytes, and can also differentiate into vascular endothelial cells and smooth muscle cells.

Product characteristics:

- 1) Isolated from the normal heart tissue of experimental animals.
- 2) Cell identification: C-kit or Sca-1 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Cardiomyocyte Culture System (Cat No: PriMed-iCELL-022) for the culturing of Primary Cardiac Stem Cells *in vitro*.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Aortic Arch Smooth Muscle Cells

CAT No: RAT/MIC/RAB-iCELL-c016

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD413/411/470

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

A major factor in the development and progression of vascular disease is the transformation of vascular smooth muscle cells (SMCs) into a reproductive phenotype. Recent studies have shown that smooth muscle cells express calcium channels, ICAM-1 and VCAM-1. The expression of ICAM-1 and VCAM-1 may be the cause of inflammation of the blood vessel wall and further cause vascular disease. Therefore, in vitro culture and study of vascular smooth muscle cells can be used to identify targeted therapeutic approaches for new vascular diseases.

Product characteristics:

- 1) Isolated from the normal aortic tissue of experimental animals.
- 2) Cell identification: α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Smooth Muscle Cell Culture System (Cat No: PriMed-iCELL-004) for the culturing of Primary Aortic Arch Smooth Muscle Cells in vitro.

Experimental Animal (Rat, Mouse, Rabbit) Primary Aortic Arch Endothelial Cells

CAT No: RAT/MIC/RAB-iCELL-c017

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD515/514/573

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Endothelial cells secrete different endothelial factors under the action of shear stress and thus affect vasoconstriction and growth. Aortic endothelial cells also regulate the expression of cell adhesion molecules to control and precisely regulate inflammatory responses and tissue fibrosis. Primary aortic endothelial cells cultured in vitro can effectively help researchers study the mechanism of endothelial dysfunction, the pathogenesis of diseases such as atherosclerosis, and the development of new treatments.

Product characteristics:

- 1) Isolated from the normal aortic tissue of experimental animals.
- 2) Cell identification: PECAM-1/CD31 or vWF immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Epithelioid, polygonal cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Endothelial Cell Culture System (Cat No: PriMed-iCELL-002) for the culturing of Primary Aortic Arch Endothelial Cells in vitro.

Experimental Animal (Rat, Mouse, Rabbit) Primary Cardiac Microvascular Endothelial Cells

CAT No: RAT/MIC/RAB-iCell-c018

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD515/514/573

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The heart is the most important organ in the body of a vertebrate. Its main function is to provide pressure to run blood to all parts of the body. The role of the heart is to promote blood flow, provide sufficient blood flow to organs and tissues to supply oxygen and various nutrients, and take away metabolic end products (such as carbon dioxide, inorganic salts, urea and uric acid) to maintain cell the normal metabolism and function.

Microvascular endothelial cells cover the surface of microvessels in a single layer, which constitutes an important barrier for the exchange of substances inside and outside the blood vessels, and is the main target for circulating blood flow and risk factors in the blood.

Product characteristics:

- 1) Isolated from the normal heart tissue of experimental animals.
- 2) Cell identification: vWF immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Polygonal cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Endothelial Cell Culture System (Cat No: PriMed-iCELL-002) for the culturing of Primary Cardiac Microvascular Endothelial Cells in vitro



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Carotid Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCELL-c019

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/459/520

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The carotid artery is present in the arteries of the vertebrate neck. There are external carotid artery and internal carotid artery. The former is distributed to the top of the head and the face, and the latter is distributed into the brain and eyelids. The aorta is composed of the inner membrane, the middle elastic layer and the outer membrane, and the three layers are closely attached together. Among them, the outer membrane layer is mainly composed of fibroblasts.

Product characteristics:

- 1) Isolated from the normal carotid tissue of experimental animals.
- 2) Cell identification: Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Carotid Fibroblasts Cells in vitro.

Experimental Animal (Rat, Mouse, Rabbit) Primary Jugular Endothelial Cells

CAT No: RAT/MIC/RAB-iCELL-c020

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD515/514/573

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The jugular vein is present in the veins of the vertebrate neck. The vascular endothelial cell layer is a natural barrier to blood and other tissues. Endothelial cells simultaneously synthesize and secrete enhancers and inhibitors of coagulation and fibrinolytic systems, as well as vehicles that affect platelet adhesion and aggregation. They also secrete proteins that control cell proliferation to maintain the health of the blood vessel wall. Endothelial cells secrete anti-thrombotic factors such as t-PA and PAI-1 as well as TNF- α , which in turn secretes the cytokine GM-CSF, which expresses ICAM-1 surface antibodies, producing large amounts of nitric oxide and endothelin. In vitro culture systems of primary venous endothelial cells help to study the function of vascular endothelial cells under specific in vitro conditions.

Product characteristics:

- 1) Isolated from the normal jugular tissue of experimental animals.
- 2) Cell identification: PECAM-1/CD31 or vWF immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Spindle, polygonal cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Endothelial Cell Culture System (Cat No: PriMed-iCELL-002) for the culturing of Primary Jugular Endothelial Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit,Pig) Primary Aortic Valve Interstitial Cells

CAT No: RAT/MIC/RAB/PIG-iCELL-c021

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD520/517/577/634

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The aortic valve is placed between the left ventricle and the aorta, Inhibits the return of blood injected into the aorta to the left ventricle.

Aortic valve calcification can cause aortic stenosis, such as insufficiency, and the important pathological changes of senile degenerative heart valve disease, the incidence of which increases with age. Studies have shown that the phenotypic transformation of valve stromal cells to urban solid cell-like cells may be one of the pathological changes of aortic valve calcification.

Product characteristics:

- 1) Isolated from the normal aortic tissue of experimental animals.
- 2) Cell identification: α -SMA or Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Interstitial Cell Culture System (Cat No: PriMed-iCELL-030) for the culturing of Primary Aortic Valve Interstitial Cells in vitro.



PIG



PIG

Experimental Animal (Rat, Mouse, Rabbit) Primary Esophageal Epithelial Cells

CAT No: RAT/MIC/RAB-iCell-d001

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD429/429/480

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The esophagus can be divided into a neck segment, a thoracic segment and a ventral segment. The cervical segment of the vertebrate esophagus is located behind the trachea and at the anterior end of the spine. The thoracic segment is located in the mediastinum between the left and right lungs. The thoracic segment is connected to the abdominal abdomen through the pupil, and the abdominal segment is shortly connected to the stomach. During the development process, the esophageal epithelial cells proliferate, from a single layer to a complex layer, the esophagus narrows the lumen, and even once blocked, and then the lumen reappears. The esophageal structure of mammals is divided into four layers from the inside to the outside: the mucosa, the submucosa, the muscular layer and the outer membrane. Among them, the mucosa layer includes the epithelium, the lamina propria and the mucosal muscle layer. The epithelium is a thick, non-keratinized stratified squamous epithelium that is resistant to abrasion and has a protective effect. At the junction of the esophagus and the gastric cardia, the stratified squamous epithelium suddenly becomes a single-layered columnar epithelium..

Product characteristics:

- 1) Isolated from the normal esophageal tissue of experimental animals.
- 2) Cell identification: PCK immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Esophageal Epithelial Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Esophageal Smooth Muscle Cells

CAT No: RAT/MIC/RAB-iCell-d002

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD377/377/429

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The esophageal structure of mammals is divided into four layers from the inside to the outside: the mucosa, the submucosa, the muscular layer and the outer membrane.

Among them, the upper 1/3 segment of the muscular layer is skeletal muscle, the lower 1/3 is smooth muscle, and the middle segment is composed of skeletal muscle and smooth muscle. The muscle fibers are arranged in two layers of an inner ring shape and an outer longitudinal shape. The esophagus also has a sphincter, located at the level of the animal cartilage, called the upper esophageal sphincter; at the lower end of the esophagus, part of the iliac crest, through the pupil, and another part of the high pressure band under the armpit, called the lower esophageal sphincter. Esophageal leiomyoma is a benign tumor originating from the smooth muscle of the esophagus. The site of occurrence is more common in the middle part of the esophagus, followed by the lower part, and the neck is rare.

Product characteristics:

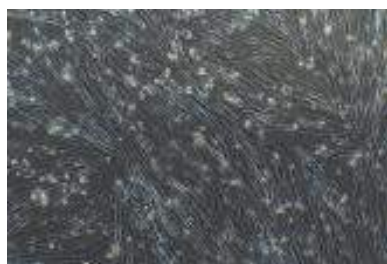
- 1) Isolated from the normal esophageal tissue of experimental animals.
- 2) Cell identification: α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Smooth Muscle Cell Culture System (Cat No: PriMed-iCELL-004) for the culturing of Primary Esophageal Smooth Muscle Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Esophageal Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCELL-d003

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD377/377/429

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The esophagus can be divided into a neck segment, a thoracic segment and a ventral segment. The cervical segment of the vertebrate esophagus is located behind the trachea and at the anterior end of the spine. The thoracic segment is located in the mediastinum between the left and right lungs. The thoracic segment is connected to the abdominal abdomen through the pupil, and the abdominal segment is shortly connected to the stomach. The esophageal structure of mammals is divided into four layers from the inside to the outside: the mucosa, the submucosa, the muscular layer and the outer membrane. Among them, the connective tissue in the mucosa layer and the submucosa layer is composed of fibroblasts cells.

Product characteristics:

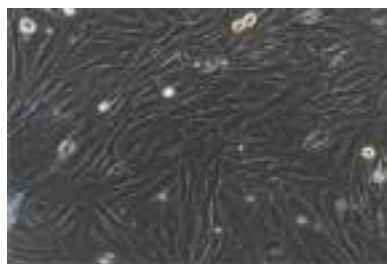
- 1) Isolated from the normal esophageal tissue of experimental animals.
- 2) Cell identification: Fibronectin or Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Esophageal Fibroblasts Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Gastric Mucosal Epithelial Cells

CAT No: RAT/MIC/RAB-iCell-d004

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD429/429/481

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The gastric mucosa is soft and the living body is orange-red. Many wrinkles are formed when the stomach is empty, which become flat when filling. The mucosa at the pylorus forms an annular fold, which is called the pyloric valve in the cavity. The gastric mucosa can be divided into three layers, namely the epithelial layer, the lamina propria and the mucosal muscle layer. Among them, the epithelial layer is a single-layer columnar epithelium, arranged neatly, can secrete mucus covering the surface of the gastric mucosa, and prevent gastric acid and pepsin damage to the gastric mucosa.

Product characteristics:

- 1) Isolated from the normal stomach tissue of experimental animals.
- 2) Cell identification: PCK or CK-19 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Human Primary Gastric Mucosal Epithelial Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Gastric Smooth Muscle Cells

CAT No: RAT/MIC/RAB-iCell-d005

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD377/377/429

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The stomach wall is generally composed of three layers of tissue, the inner layer is a mucosal layer, the outer layer is a serosal layer, and the middle is a muscle layer composed of smooth muscle. Gastric leiomyoma is the most common benign mesenchymal tumor of the stomach, originating from mesoderm tissue. Therefore, in vitro culture of gastric smooth muscle cells provides a prerequisite and basis for the study of gastric leiomyoma.

Product characteristics:

- 1) Isolated from the normal stomach tissue of experimental animal.
- 2) Cell identification: α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Smooth Muscle Cell Culture System (Cat No: PriMed-iCELL-004) for the culturing of Primary Gastric Smooth Muscle Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Gastric Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCell-d006

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD377/383/429

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The stomach wall is generally composed of three layers of tissue, the inner layer is a mucosal layer, the outer layer is a serosal layer, and the middle is a muscle layer composed of smooth muscle. Fibroblasts are the most common cells in connective tissue and are differentiated from embryonic mesenchymal cells. One of the main functions of fibroblasts is the synthesis of collagen and other extracellular matrices, which play an important role in the process of tissue and organ fibrosis.

Product characteristics:

- 1) Isolated from the normal stomach tissue of experimental animal.
- 2) Cell identification: Fibronectin or Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Gastric Fibroblasts Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Small Intestinal Mucosal Epithelial Cells

CAT No: RAT/MIC/RAB-iCELL-d007

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD480/480/583

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The small intestine is located in the abdomen, the upper end of the pylorus is connected to the stomach, and the lower end is connected to the large intestine through the cardia. It is the main place for digestion and absorption of food. It is entangled in the abdominal cavity, the upper end connected to the pylorus of the stomach and the lower end is connected to the cecum. The total length is about 5-6 meters, and there is half a basketball in the open. It is divided into three parts: duodenum, jejunum and ileum. The wall of the tube is composed of mucosa, submucosa, muscle layer and serosa. The structural feature is that the tube wall has annular folds, the mucous membrane has a lot of fluff, and the epithelium of the root of the villi falls to the lamina propria, forming a tubular intestinal gland whose opening is located between the roots of the villi. The villus and intestinal glands are closely related to the digestion and absorption functions of the small intestine.

Product characteristics:

- 1) Isolated from the normal small intestine tissue of experimental animal.
- 2) Cell identification: CK-19 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Small Intestinal Mucosal Epithelial Cells in vitro.



MIC



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Small Intestinal Smooth Muscle Cells

CAT No: RAT/MIC/RAB-iCELL-d008

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD377/377/429

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The small intestine is located in the abdomen, the upper end of the pylorus is connected to the stomach, and the lower end is connected to the large intestine through the caecum. It is the main place for digestion and absorption of food. It is entangled in the abdominal cavity, the upper end connected to the pylorus of the stomach and the lower end is connected to the caecum. The total length is about 5-6 meters, and there is half a basketball in the open. It is divided into three parts: duodenum, jejunum and ileum. The wall of the tube is composed of mucosa, submucosa, muscle layer and serosa. The structural feature is that the tube wall has annular folds, the mucous membrane has a lot of fluff, and the epithelium of the root of the villi falls to the lamina propria, forming a tubular intestinal gland whose opening is located between the roots of the villi. The villus and intestinal glands are closely related to the digestion and absorption functions of the small intestine.

Product characteristics:

- 1) Isolated from the normal small intestine tissue of experimental animal.
- 2) Cell identification: α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Smooth Muscle Cell Culture System (Cat No: PriMed-iCELL-004) for the culturing of Primary Small Intestinal Smooth Muscle Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Small Intestine Crypt Epithelial Cells

CAT No: RAT/MIC/RAB-iCell-d009

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD482/480/583

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The small intestine is located in the abdomen, the upper end of the pylorus is connected to the stomach, and the lower end is connected to the large intestine through the cardia. The small intestine epithelium consists of a single layer of columnar epithelial cells that are bent and folded to form a depressed crypt and a convex villus structure, while several crypts cluster with a pile structure to form a crypt fluff unit. In vitro culture of small intestinal crypt epithelial cells provides a prerequisite and basis for studying the mechanism of small intestinal mucosal repair and maintaining the integrity of small intestinal mucosa.

Product characteristics:

- 1) Isolated from the normal small intestine tissue of experimental animal.
- 2) Cell identification: PCK immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Small Intestine Crypt Epithelial Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Small Intestinal Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCELL-d010

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD379/377/429

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The small intestine is located in the abdomen, the upper end of the pylorus is connected to the stomach, and the lower end is connected to the large intestine through the cardia. It is the main place for digestion and absorption of food. It is entangled in the abdominal cavity, the upper end connected to the pylorus of the stomach and the lower end is connected to the cecum. The total length is about 5-6 meters, and there is half a basketball in the open. Divided into three parts: duodenum, jejunum and ileum. There is connective tissue around the wall of the tube. These connective tissues are composed of fibroblasts, which support and protect the small intestine.

Product characteristics:

- 1) Isolated from the normal small intestine tissue of experimental animal.
- 2) Cell identification: Fibronectin or Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Small Intestinal Fibroblasts Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Colonic Mucosal Epithelial Cells

CAT No: RAT/MIC/RAB-iCell-d011

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD480/480/583

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The colon continues in the right iliac fossa and connects to the rectum at the third sacral plane. The colon is divided into four parts, ascending colon, transverse colon, descending colon and sigmoid colon. Most of them are fixed to the posterior wall of the abdomen. The arrangement of the colon resembles the English letter "M" and encloses the small intestine. The transverse section of the colon from the inside to the outside is: mucosa (epithelial, lamina propria, mucosal muscularis), submucosa, muscularis and adventitia. Colonic mucosal epithelium leads to colon cancer under the influence of various carcinogenic factors such as environment or heredity, and is one of the most common malignant tumors. Therefore, in vitro culture of colonic mucosal epithelial cells provides a prerequisite and basis for further diseases such as colon cancer.

Product characteristics:

- 1) Isolated from the normal colon tissue of experimental animal.
- 2) Cell identification: CK-18 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Colonic Mucosal Epithelial Cells.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Colon Smooth Muscle Cells

CAT No: RAT/MIC/RAB-iCELL-d012

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD377/379/429

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The colon continues in the right iliac fossa and connects to the rectum at the third sacral plane. The colon is divided into four parts, ascending colon, transverse colon, descending colon and sigmoid colon. Most of them are fixed to the posterior wall of the abdomen. The arrangement of the colon resembles the English letter "M" and encloses the small intestine.

The transverse section of the colon from the inside to the outside is: mucosa (epithelial, lamina propria, mucosal muscularis), submucosa, muscularis and adventitia.

In the colonic tumor microenvironment, where fibroblasts (NFs) contact with cancer cells, they transform into cancer-associated fibroblasts (CAFs), which play an important role in the malignant transformation of epithelial tumors.

Product characteristics:

- 1) Isolated from the normal colon tissue of experimental animal.
- 2) Cell identification: α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Smooth Muscle Cell Culture System (Cat No: PriMed-iCELL-004) for the culturing of Primary Colon Smooth Muscle Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Colon Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCELL-d013

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD379/377/429

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The colon continues in the right iliac fossa and connects to the rectum at the third sacral plane. The colon is divided into four parts, ascending colon, transverse colon, descending colon and sigmoid colon. Most of them are fixed to the posterior wall of the abdomen. The arrangement of the colon resembles the English letter “M” and encloses the small intestine.

The transverse section of the colon from the inside to the outside is: mucosa (epithelial, lamina propria, mucosal muscularis), submucosa, muscularis and adventitia.

In the colonic tumor microenvironment, where fibroblasts (NFs) contact with cancer cells, they transform into cancer-associated fibroblasts (CAFs), which play an important role in the malignant transformation of epithelial tumors.

Product characteristics:

- 1) Isolated from the normal colon tissue of experimental animal.
- 2) Cell identification: Fibronectin or Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Fibroblast-like cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Colon Fibroblasts Cells *in vitro*.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Gallbladder Epithelial Cells

CAT No: MIC/RAB-iCELL-d014

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/515

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The bile ducts transport the bile ducts. Bile secreted by the liver enters the gallbladder through the left, right, common hepatic, and cystic ducts. The intrahepatic bile duct includes the left and right hepatic ducts, the left internal leaf, left external leaf, right anterior leaf, and right posterior bile duct, the liver bile duct, interlobular bile duct and bile duct.

Common bile duct lesions such as biliary obstruction, primary sclerosing cholangitis, and biliary tract cancer all use the bile duct epithelium as the lesion target. Therefore, it is important to study the biological characteristics and pathological changes of the biliary epithelial cells. In these pathological processes, the intrahepatic bile duct epithelium is often exposed to higher inflammatory factors, which can manifest pathological changes characterized by cell damage and secondary proliferation..

Product characteristics:

- 1) Isolated from the normal gallbladder tissue of experimental animal.
- 2) Cell identification: CK-19 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Epithelioid, polygonal cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Gallbladder Epithelial Cells *in vitro*.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Intrahepatic Bile Duct Epithelial Cells

CAT No: RAT/MIC/RAB-iCELL-d015

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD634/634/722

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The bile ducts transport the bile ducts. Bile secreted by the liver enters the gallbladder through the left, right, common hepatic, and cystic ducts. The intrahepatic bile duct includes the left and right hepatic ducts, the left internal leaf, left external leaf, right anterior leaf, and right posterior bile duct, the liver bile duct, interlobular bile duct and bile duct.

Common bile duct lesions such as biliary obstruction, primary sclerosing cholangitis, and biliary tract cancer all use the bile duct epithelium as the lesion target. Therefore, it is important to study the biological characteristics and pathological changes of the biliary epithelial cells. In these pathological processes, the intrahepatic bile duct epithelium is often exposed to higher inflammatory factors, which can manifest pathological changes characterized by cell damage and secondary proliferation..

Product characteristics:

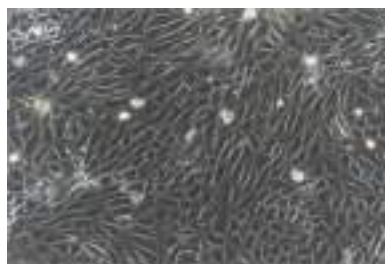
- 1) Isolated from the normal bile duct tissue of experimental animal.
- 2) Cell identification: CK-19 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Epithelioid, polygonal cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Intrahepatic Bile Duct Epithelial Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Extrahepatic Bile Duct Epithelial Cells

CAT No: RAT/MIC/RAB-iCell-d016

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/517

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The extrahepatic bile duct consists of the left and right hepatic ducts, the common hepatic duct, and the common bile duct. The intrahepatic bile ducts form a left and right hepatic duct through multiple levels of confluence. After the left and right hepatic ducts emerge from the liver, they merge to form a common hepatic duct at the hilum. The common hepatic duct and the cystic duct form a common bile duct. Extrahepatic bile duct epithelial cells play an important role in maintaining, regulating, and expanding biliary structures by controlling hormone-regulated secretion and absorption. Lesions of extrahepatic bile duct epithelial cells mainly cause cholangitis and bile duct stones.

Product characteristics:

- 1) Isolated from the normal bile duct tissue of experimental animal.
- 2) Cell identification: PCK immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Extrahepatic Bile Duct Epithelial Cells *in vitro*.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Hepatic Parenchymal Cells

CAT No: RAT/MIC/RAB-iCell-d017

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD429/429/481

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

With the improvement of people's living standards and changes in dietary habits, the incidence of cancer is also increasing, such as liver cancer, gastric cancer and colorectal cancer. As an important organ of the human body, the liver has a wide range of functions throughout the metabolism of the substance. The liver is also an important organ for drug metabolism in the body. The impact of complex environments on drug metabolism is self-evident. However, it is difficult to study the molecular mechanism of drug or other chemical substances in hepatocyte metabolism. Therefore, we established an in vitro primary hepatocyte culture model for the study of molecular biological characteristics of hepatocytes as a useful complement to the in vivo liver research model. The hepatocytes in the liver were isolated, purified and cultured in vitro by a modified perfusion method. The growth and functional status of primary hepatocytes were analyzed comprehensively. It provides more valuable clues for the study of the molecular biological characteristics of hepatocytes and the mechanism of action of new drugs on the liver to better explain the mechanism of drug action.

Product characteristics:

- 1) Isolated from the normal liver tissue of experimental animal.
- 2) Cell identification: glucose-6-phosphatase immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Epithelioid, polygonal cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Hepatocyte Culture System (Cat No: PriMed-iCELL-008) for the culturing of Primary Hepatic Parenchymal Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Hepatic Stellate Cells

CAT No: RAT/MIC/RAB-iCell-d018

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD497/497/549

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Hepatic stellate cells are located in the gap of Disse, close to the liver sinusoidal endothelial cells and hepatocytes. It has irregular shape, cell body is round or irregular, often protruding several astrocytes around the hepatic sinusoids. In addition, the HSC also protrudes from the cell and contacts the hepatocytes and adjacent stellate cells. HSC is the main source of ECM. HSC is activated and transformed into myofibroblast-like cells (MFC), and various fibrogenic factors use HSC as the final target cells. Hepatic stellate cells are activated and transformed into myofibroblast-like cells (MFC). Normally, hepatic stellate cells are at rest. When the liver is damaged by inflammation or mechanical stimulation, the hepatic stellate cells are activated and their phenotype changes from a static type to an activated type. On the one hand, activated hepatic stellate cells participate in the formation of liver fibrosis and the reconstruction of intrahepatic structures by proliferating and secreting extracellular matrix, and on the other hand, the intrahepatic sinus pressure is increased by cell contraction.

Product characteristics:

- 1) Isolated from the normal liver tissue of experimental animal.
- 2) Cell identification: Desmin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, stellate cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Stellate Cell Culture System (Cat No: PriMed-iCELL-009) for the culturing of Primary Hepatic Stellate Cells *in vitro*.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Sinusoidal Endothelial cells

CAT No: RAT/MIC/RAB-iCELL-d019

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD497/497/557

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Liver sinusoidal endothelial cells are the most abundant in the non-parenchymal cells of the liver, accounting for about 70% of the total number of non-parenchymal cells, and they have great difference in phenotype and function with common capillary endothelial cells. There is a lack of cell-to-cell connections between sinusoidal endothelial cells, and there are few basement membranes. Therefore, sinus endothelium permeability is higher, which is beneficial to regulate substance exchange.

The fenestrule is the most characteristic structure of liver sinusoidal endothelial cells, ranging from $<10\text{nm}$ to $1\text{-}2\mu\text{m}$. Due to the presence of the fenestrule structure and the lack of an intact basement membrane under the physiologic conditions, the sinusoidal endothelial cells constitute The hepatic sinusoidal wall composed of hepatic sinusoidal endothelial cells is the only capillarity lacking the basement membrane in the capillary wall of the whole body. In addition to the blood cells inside the sinusoid, plasma can enter the Disse gap from the fenestrule for exchanging material.

Product characteristics:

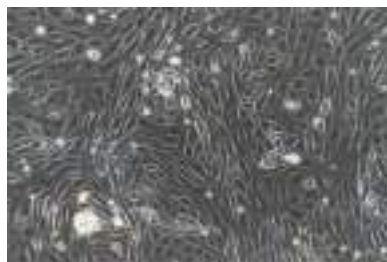
- 1) Isolated from the normal liver tissue of experimental animal.
- 2) Cell identification: vWF immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Epithelioid, polygonal cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Endothelial Cell Culture System (Cat No: PriMed-iCELL-002) for the culturing of Primary Sinusoidal Endothelial cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Liver Kuffer Cells

CAT No: RAT/MIC/RAB-iCell-d020

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD497/497/552

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Hepatic Kuffer cells are phagocytic cells located on the inner surface of liver sinusoids. They are located in the hepatic sinusoidal cavity with deformed movement and active phagocytosis. They also have functions of handling and delivering antigens, regulating immune responses. It is a major member of the mononuclear phagocytic system. It is an important defensive cell that sterilizes bacteria and its toxins and antagonizes infection. It also plays a leading role in the occurrence of endotoxin-induced liver damage by releasing various inflammatory mediators.

Product characteristics:

- 1) Isolated from the normal liver tissue of experimental animal.
- 2) Cell identification: F4/80 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Round, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Macrophage Culture System (Cat No: PriMed-iCELL-011) for the culturing of Primary Liver Kuffer Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Colonic Neuronal Cells

CAT No: RAT/MIC/RAB-iCELL-d021

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD554/551/600

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The colon continues in the right iliac fossa and connects to the rectum at the third sacral plane. The colon is divided into four parts, ascending colon, transverse colon, descending colon and sigmoid colon. Most of them are fixed to the posterior wall of the abdomen. The arrangement of the colon resembles the English letter “M” and encloses the small intestine.

Neurons are the basic unit of structure and function of the nervous system. Neurons have long processes that are composed of cell bodies and cell processes.

Product characteristics:

- 1) Isolated from the normal colon tissue of experimental animal.
- 2) Cell identification: NSE immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Irregular cells, adherent culture.

Recommended Medium:

We recommended to use Primary Neural Stem Cell Culture System (Cat No: PriMed-iCELL-005) for the culturing of Primary Colonic Neuronal Cells *in vitro*.

Experimental Animal (Rat, Mouse, Rabbit, Duck) Primary Hepatic Stromal Cells

CAT No: RAT/MIC/RAB/DUC-iCell-d022

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/459/520/520

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The liver is the largest gland in the human body and the largest substantial organ. Hepatic stromal cells belong to adult stem cells, and it has been found that it can differentiate into bone, cartilage, tendon, fat, and the like. The differentiation of adult stem cells into muscle cells makes a much better choice for the treatment of many muscle degenerative and hereditary diseases.

Product characteristics:

- 1) Isolated from the normal liver tissue of experimental animal.
- 2) Cell identification: CD44 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Mesenchyma Stem Cell Culture System (Cat No: PriMed-iCELL-012) for the culturing of Primary Hepatic Stromal Cells in vitro.



DUK



DUK

Experimental Animal (Rat, Mouse, Rabbit) Primary Hepatic Fibroblasts Cells

CAT No: HUM-iCELL-d023

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD429/425/486

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

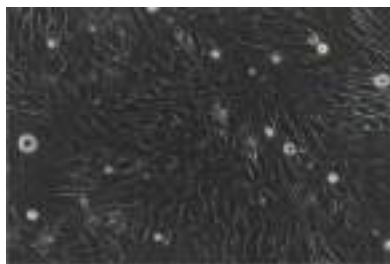
The liver is an organ with a metabolic function in the body, and plays a role in the body to deoxidize, store glycogen, and synthesize secretory proteins. The liver also makes bile in the digestive system. The liver is the main organ for the synthesis of urea and an important organ for metabolism. The liver has biotransformation effects on many non-nutritive substances such as various drugs, poisons and certain metabolites in the body from both in vivo and in vitro. They are completely decomposed by metabolism or excreted in their original form. There are some connective tissues in and around the liver. These connective tissues are composed of fibroblasts cells.

Product characteristics:

- 1) Isolated from the normal liver tissue of experimental animal.
- 2) Cell identification: Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Hepatic Fibroblasts Cells in vitro.



MIC



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Intestinal Interstitial Cells

CAT No: RAT/MIC/RAB-iCell-d024

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD486/482/543

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Cajal interstitial cells are a special kind of cells which networked between the distal end of the digestive tract enteric nervous system and smooth muscle cells. The production and maintenance of gastrointestinal motility is the result of synergy between Cajal interstitial cells, enteric nervous system and smooth muscle cells. Interstitial cells not only spontaneously produce rhythmic slow waves, but also mediate signal regulation between the enteric nervous system and smooth muscle.

Product characteristics:

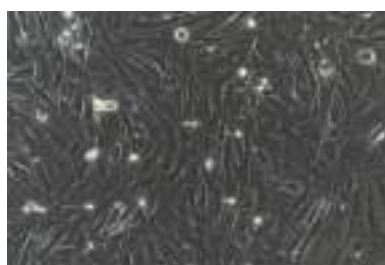
- 1) Isolated from the normal liver tissue of experimental animal.
- 2) Cell identification: c-kit immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Interstitial Cell Culture System (Cat No: PriMed-iCELL-025) for the culturing of Primary Intestinal Interstitial Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Renal Tubular Epithelial Cells

CAT No: RAT/MIC/RAB-iCELL-u001

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD497/497/549

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The elongated epithelial tubule connect the renal tubule and the parietal sac wall has the function of reabsorption and excretion. The renal tubule is divided into three parts according to different morphological structure, distribution location and function; proximal tubule, medulla and distal end small tube.

The average length of the renal tubules is about 30-50mm, which is composed of a single layer of epithelium. Ischemia, infection and poison can cause degeneration and necrosis of renal tubular epithelial cells, leading to renal dysfunction. Aldosterone, vasopressin, atrial natriuretic peptide, parathyroid hormone, etc., can also lead to changes in renal tubular function. Because of the different structure and function of the renal tubules in different segments, the performance varies with dysfunction..

Product characteristics:

- 1) Isolated from the normal kidney tissue of experimental animal.
- 2) Cell identification: CK-18 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Renal Tubular Epithelial Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Glomerular Mesangial Cells

CAT No: RAT/MIC/RAB-iCELL-u002

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD377/377/429

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Mesenteric cells are very active cells in the glomerulus and have the function of secreting cell matrix, producing cytokines, phagocytosis and clearance of macromolecular substances and contraction of smooth muscle cells. At the same time, it also can produce and degrade a variety of extracellular matrix, participate in the repair and renewal of mesangial matrix and glomerular basement membrane, and play an important role in glomerular physiological functions and pathological reactions.

Product characteristics:

- 1) Isolated from the normal kidney tissue of experimental animal.
- 2) Cell identification: Desmin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Glomerular Mesangial Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Glomerular Endothelial Cells

CAT No: RAT/MIC/RAB-iCELL-u003

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD566/566/653

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The glomerulus is a cluster of capillary blood in the kidney that is used to filter blood to produce primary urine. In the glomerulus, the microvessels are subjected to high pressure, which accelerates the progress of ultrafiltration. The glomerular filtration membrane has three layers from the inside to the outside: the inner layer, the middle layer and the outer layer. The inner layer is an endothelial cell layer and is attached to the glomerular basement membrane.

Product characteristics:

- 1) Isolated from the normal kidney tissue of experimental animal.
- 2) Cell identification: Factor VIII or vWF immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Polygonal cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Endothelial Cell Culture System (Cat No: PriMed-iCELL-002) for the culturing of Primary Glomerular Endothelial Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Renal Podocytes Cells

CAT No: RAT/MIC/RAB-iCELL-u004

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD429/429/483

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The glomerulus is a blood filter and the glomerular capillary wall constitutes a filter membrane. The glomerular filtration membrane has a three-layer structure from the inside to the outside: the inner layer is the endothelium, the middle layer is the glomerular basement membrane, and the outer layer is the epithelial cell layer.

Kidney podocytes are glomerular epithelial cells that attach to the outside of the glomerular basement membrane, constitute a glomerular blood filtration barrier together with the glomerular basement membrane and the glomerular basement membrane. In addition, due to the normal podocytes in the adult body are terminally differentiated cells, the primary cells cultured in vitro cannot proliferate.

The podocytes are star-shaped with multiple projections, and the cell body is large. A number of protrusions protrude from the cell body, interdigitated over the outer surface of the glomerular basement membrane, and are connected to the glomerular basement membrane through adhesion molecules and proteoglycan molecules.

Product characteristics:

- 1) Isolated from the normal kidney tissue of experimental animal.
- 2) Cell identification: PCK or WT-1 (Wilm's Tumor Protein) immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Irregular, podocytes cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Renal Podocytes Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Ureteral Epithelial Cells

CAT No: RAT/MIC/RAB-iCELL-u005

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/515

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The ureter is located in the retroperitoneum and is a tubular structure composed of a muscle mucosa, which starts from the renal pelvis and ends in the bladder triangle. The ureteral wall is divided into 4 layers: the mucosal surface, the lamina propria, the ureter muscle layer and the outer membrane. Among them, the mucosal surface is a transitional epithelium. The study of urothelium is a hot topic in the field of urology, including urothelial tumor research and ureteral injury research. Therefore, in vitro culture of ureteric epithelial cells is the basis and prerequisite for ureteral biology research.

Product characteristics:

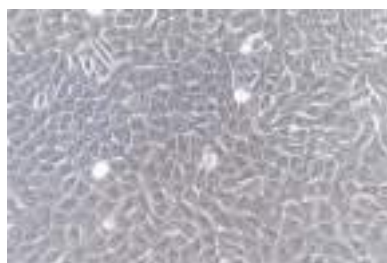
- 1) Isolated from the normal ureteral tissue of experimental animal.
- 2) Cell identification: PCK immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Keratinocyte Culture System (Cat No: PriMed-iCELL-010) for the culturing of Primary Ureteral Epithelial Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Ureteral Smooth Muscle Cells

CAT No: RAT/MIC/RAB-iCELL-u006

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD411/411/463

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The ureter is located in the retroperitoneum and is a tubular structure composed of a muscle mucosa, which starts from the renal pelvis and ends in the bladder triangle. The ureteral wall is divided into 4 layers: the mucosal surface, the lamina propria, the ureter muscle layer and the outer membrane. Among them, the muscular layer is mainly composed of two layers of smooth muscles, the inner longitudinal and the outer ring.

Product characteristics:

- 1) Isolated from the normal ureteral tissue of experimental animal.
- 2) Cell identification: α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Smooth Muscle Cell Culture System (Cat No: PriMed-iCELL-004) for the culturing of Primary Ureteral Smooth Muscle Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit, Pig) Primary Bladder Epithelial Cells

CAT No: RAT/MIC/RAB/PIG-iCELL-u007

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD429/429/481/538

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The bladder wall is composed of three layers of tissue, from the inside to the outside, the mucosal layer, the muscular layer and the outer membrane. Among them, the mucosa layer is a very thin layer of transitional epithelial tissue, connected with the ureter and urethra mucosa. In vitro culture of bladder epithelial cells not only provides the necessary means for planting cells for tissue engineering bladder and urethra, but also the basis and premise for studying tumorigenesis and treatment of transitional epithelial cells.

Product characteristics:

- 1) Isolated from the normal bladder tissue of experimental animal.
- 2) Cell identification: PCK immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Keratinocyte Culture System (Cat No: PriMed-iCELL-010) for the culturing of Primary Bladder Epithelial Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit, Pig) Primary

Bladder Smooth Muscle Cells

CAT No: RAT/MIC/RAB/PIG-iCELL-u008

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD377/377/481/538

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The bladder wall is composed of three layers of tissue, from the inside to the outside, the mucosal layer, the muscular layer and the outer membrane. Among them, the muscular layer is composed of smooth muscle. In vitro culture of bladder smooth muscle cells not only provides the necessary means for planting cells for tissue engineering bladder and urethra, but also the basis and premise for studying leiomyoma.

Product characteristics:

- 1) Isolated from the normal bladder tissue of experimental animal.
- 2) Cell identification: α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Smooth Muscle Cell Culture System (Cat No: PriMed-iCELL-004) for the culturing of Primary Bladder Smooth Muscle Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Bladder Stromal Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCELL-u009

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD377/377/429

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The bladder is a urine storage organ. It is a cystic structure located in the pelvis with its posterior opening communicating with the urethra. There is a sphincter at the junction of the bladder and the urethra, which can control the discharge of urine. Bladder stromal fibroblasts play a very important role as supporting cells for bladder epithelial cells. In vitro culture of bladder matrix fibroblasts not only provides the necessary means for planting cells, but also the basis and premise for studying bladder fibrosis.

Product characteristics:

- 1) Isolated from the normal bladder tissue of experimental animal.
- 2) Cell identification: Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Bladder Stromal Fibroblasts Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Prostate Epithelial Cells

CAT No: RAT/MIC/RAB-iCELL-u010

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/517

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The prostate is located below the neck of the bladder and surrounds the junction of the bladder mouth and the urethra. Epithelial cells are closely related to the function of the prostate. Injury of epithelial cells is the main symptom of prostatitis. Exfoliated epithelial cells can be detected in the prostatic fluid of patients with severe prostatitis, which is a marker of epithelial cell damage. Therefore, in vitro culture of prostate epithelial cells is the premise and basis for the study of diseases such as prostatitis and prostatic intraepithelial neoplasia.

Product characteristics:

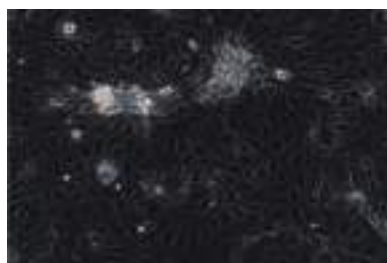
- 1) Isolated from the normal prostate tissue of experimental animal.
- 2) Cell identification: PCK immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Human Primary Prostate Epithelial Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit, Pig) Primary

Prostate Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCELL-u011

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD411/411/463/520

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The prostate is located below the neck of the bladder and surrounds the junction of the bladder mouth and the urethra. The shape is different and the gland is irregular. The prostate has more intermediate substances and is rich in elastic fibers. Prostatitis causes prostate tissue to produce pathological changes characterized by fibrosis, such as tissue hyperplasia around the acinus, fibrosis, acinar wrinkles, etc., clinical symptoms of urinary obstruction such as dysuria, urinary incontinence. Therefore, in vitro culture of prostate fibroblasts is the premise and basis for the study of diseases such as prostatitis.

Product characteristics:

- 1) Isolated from the normal prostate tissue of experimental animal.
- 2) Cell identification: Fibronectin or Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Prostate Fibroblasts Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Renal Pericytes Cells

CAT No: RAT/MIC/RAB-iCELL-u012

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD486/482/543

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The kidney is an organ of the vertebrate. It is part of the urinary system. It is responsible for filtering impurities in the blood, maintaining the balance between body fluids and electrolytes, and finally producing urine through the urethra. It also has endocrine function to regulate blood pressure.

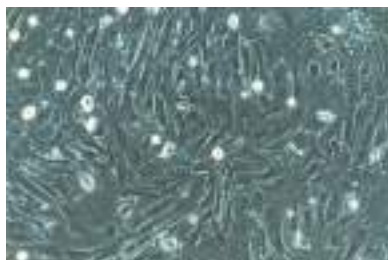
Pericytes are cells that surround endothelial cells in the body's capillaries and veins and can contract. Pericytes produce finger-like epitaxy to regulate blood flow to the capillaries. There is a basement membrane between the pericytes and endothelial cells, and there are a variety of cell junctions on the basement membrane, including various integrins, neurokaryozoins, fibronectin, and junctions.

Product characteristics:

- 1) Isolated from the normal kidney tissue of experimental animal.
- 2) Cell identification: α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Peripheral Cell Culture System (Cat No: PriMed-iCELL-015) for the culturing of Primary Renal Pericytes Cells *in vitro*.



MIC

Experimental Animal (Rat, Mouse, Rabbit, Pig) Primary Thyroid Epithelial Cells

CAT No: RAT/MIC/RAB/PIG-iCELL-g001

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/518/575

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The thyroid gland is the largest endocrine gland in the human body. Brownish red, divided into left and right leaves, connected in the middle, in an "H" shape. Thyroid follicles are the basic structural unit of the thyroid gland. The outer periphery of the follicle is a layer of epithelial cells. The thyroid epithelial cells are the site of synthesis and release of thyroid hormone. The follicular cavity is filled with a uniform gelatinous substance, which is a thyroid hormone complex. It is also a repository of thyroid hormones. At the same time, epithelial cells have a strong ability to absorb iodide. When the thyroid body activity is weakened, the epithelial cells are flat.

Product characteristics:

- 1) Isolated from the normal thyroid tissue of experimental animal.
- 2) Cell identification: Tg immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Thyroid Epithelial Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Thyroid Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCELL-g002

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD411/411/463

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The thyroid gland is the largest endocrine gland in the human body. Brownish red, divided into left and right leaves, connected in the middle, in an "H" shape. Thyroid follicles are the basic structural unit of the thyroid gland. In addition, there are some connective tissues in the thyroid and in the periphery. These connective tissues are composed of fibroblasts and protect the follicles.

Product characteristics:

- 1) Isolated from the normal thyroid tissue of experimental animal.
- 2) Cell identification: Fibronectin or Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Fibroblasts Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Thyroid Fibroblasts Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Pancreatic Stellate Cells

CAT No: RAT/MIC/RAB-iCELL-g003

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD531/531/585

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Progressive fibrosis of the pancreas is a typical pathological manifestation of chronic pancreatitis. A central role in this process is a polygonal or pancreatic stellate cell. Pancreatic stellate cells are distributed between the interlobular lobes and acinar cells. During pancreatic fibrosis, they are activated by various pathological factors, secreting a variety of extracellular matrices, including collagen, which initiates and promotes the pathological process of fibrosis. Under the normal circumstances, pancreatic stellate cells are in a non-activated quiescent state, spherical. When the pancreas is damaged or stimulated by cell growth factors, it becomes active.

Product characteristics:

- 1) Isolated from the normal pancreatic tissue of experimental animal.
- 2) Cell identification: Desmin or α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Polyhedral or stellate, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Stellate Cell Culture System (Cat No: PriMed-iCELL-009) for the culturing of Primary Pancreatic Stellate Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Islet cells

CAT No: RAT/MIC/RAB-iCELL-g004

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD600/600/655

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Islet cells secrete glucagon, which acts in concert with insulin to regulate blood sugar levels. Islet can be divided into β cells, α cells, δ cells, and islet PP cells according to its function of secreting hormones. In vitro culture of islet cells provides a prerequisite and basis for islet transplantation, insulin secretion mechanism and mechanism of action of hypoglycemic drugs.

Product characteristics:

- 1) Isolated from the normal pancreatic tissue of experimental animal.
- 2) Cell identification: DTZ immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Island-like cluster growth, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Islet β Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Islet Beta Cells

CAT No: RAT/MIC/RAB-iCELL-g005

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD583/583/634

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Islet cells secrete glucagon, which acts in concert with insulin to regulate blood sugar levels. Islet can be divided into β cells, α cells, δ cells, and islet PP cells according to its function of secreting hormones. Impaired islet beta cell function, absolute or relative lack of insulin secretion (insulin resistance), will raise blood sugar, which causes diabetes. Islet beta cell cancer can produce insulinoma, causing symptoms of malignant blood sugar lowering.

Product characteristics:

- 1) Isolated from the normal pancreatic tissue of experimental animal.
- 2) Cell identification: Insulin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Cell pellets, semi-suspended and semi-adherent cultures.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Islet β Cells in vitro.

Experimental Animal (Rat, Mouse, Rabbit, Pig) Primary Pituitary Cells

CAT No: RAT/MIC/RAB/PIG-iCELL-g006

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD514/514/566/623

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The pituitary gland is an important endocrine gland of the body. It is composed of cells such as growth hormone and adrenocorticotrophic cells, and plays an important role in the growth and development, life activities, endocrine regulation, and aging and death of the body. Therefore, the in vitro culture of pituitary cells provides a basis and premise for further study of the neuroendocrine regulation mechanism of pituitary and reproductive and pituitary transplantation research.

Product characteristics:

- 1) Isolated from the normal pancreatic tissue of experimental animal.
- 2) Cell identification: LH、FSH 与 PRL immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Spindle or polygonal, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Pituitary Cells in vitro.

Experimental Animal (Rat, Mouse, Rabbit) Primary Thymocytes Cells

CAT No: RAT/MIC/RAB-iCELL-g007

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/519

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

As a central immune organ of mammals, the thymus is not only a place where T lymphocytes differentiate, develop, mature, but also export T lymphocytes to the peripheral T cell bank. Thymocytes are dense in the cortex, and their expression of autoantigens promotes the origin of thymocytes. In this dynamic process, some essential factors are secreted to affect the cortical cells.

Product characteristics:

- 1) Isolated from the normal pancreatic tissue of experimental animal.
- 2) Cell identification: PCK immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Thymocytes Cells *in vitro*.

Experimental Animal (Rat, Mouse, Rabbit) Primary Thymic Stromal Cells

CAT No: RAT/MIC/RAB-iCELL-g008

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD411/411/463

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

As a central immune organ of mammals, the thymus is not only a place where T lymphocytes differentiate, develop, mature, but also export T lymphocytes to the peripheral T cell bank. The structure of the thymus has a connective tissue envelope, and the connective tissue extends into the thymus parenchyma to divide the thymus into a number of incompletely separated leaflets. Among them, connective tissue is composed of fibroblasts, which protect and support other cells in the thymus.

Product characteristics:

- 1) Isolated from the normal pancreatic tissue of experimental animal.
- 2) Cell identification: Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Endothelial Cell Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Thyroid Microvascular Endothelial Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Submandibular Gland Epithelial Cells

CAT No: RAT/MIC/RAB-iCELL-g009

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/518

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The submandibular gland is located at the lower edge of the lower jaw and is a kind of parotid gland. Its main function is to secrete saliva and participate in chewing, swallowing, digestion, and pronunciation. However, radiotherapy of parotid gland disease and head and neck malignancy often leads to irreversible damage to the parotid gland, resulting in reduced salivation. The in vitro culture of submandibular gland cells has a positive significance in exploring the mechanism of disease occurrence and seeking repair and regeneration of the parotid gland.

Product characteristics:

- 1) Isolated from the normal submandibular gland tissue of experimental animal.
- 2) Cell identification: CK-8 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Submandibular Gland Epithelial Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Renal Epithelial Glial Cells

CAT No: RAT/MIC/RAB-iCELL-g010

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD514/514/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The adrenal cortex consists of three layers, and its abnormal function can cause hyperadhesive concept, adrenal cortical hypofunction, adrenal hyperplasia and so on. Primary adrenal insufficiency may cause adrenal cortical damage due to autoimmunity, hemorrhage, etc. Therefore, in vitro culture of adrenocortical cells provides a basis and premise for the study of diseases such as adrenal insufficiency.

Product characteristics:

- 1) Isolated from the normal submandibular adrenal tissue of experimental animal.
- 2) Cell identification: 3β -HSD immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Round, polygonal, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Renal Epithelial Glial Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit, Pig) Primary Adrenal Medulla Cells

CAT No: RAT/MIC/RAB/PIG-iCELL-g011

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/515/623

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The adrenal medulla is located in the center of the adrenal gland. Adrenal medulla cells secrete two hormones: adrenaline and norepinephrine. The adrenal medulla cells are large, polygonal, arranged in clusters or irregular cords around the sinusoids, and contain fine particles inside the cells.

Product characteristics:

- 1) Isolated from the normal adrenal tissue of experimental animal.
- 2) Cell identification: NSE immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Adrenal Medulla Cells *in vitro*.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Sperm Cells

CAT No: RAT/MIC/RAB-iCELL-f001

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD449/447/497

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The spermatogonia is located on the basement membrane of the seminiferous tubule. It not only maintains its own number, but also differentiates into adult stem cells that produce spermatocytes. It is the only immortalized cell in the male adult that can undergo mitosis to transfer genetic material to the next generation. Therefore, in vitro culture of spermatogonia provides a basis and premise for further research on the function of spermatogonial cells.

Product characteristics:

- 1) Isolated from the normal testicular tissue of experimental animal.
- 2) Cell identification: c-kit immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Round, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Sperm Cells Culture System (Cat No: PriMed-iCELL-034) for the culturing of Primary Sperm Cells in vitro.

Experimental Animal (Rat, Mouse, Rabbit, Pig) Primary Sertoli Cells

CAT No: RAT/MIC/RAB/PIG-iCELL-f002

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD429/429/480/537

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The testicular stromal cells are distributed in the seminiferous tubules. The cell bodies are round, elliptical or irregular. The cell bodies are large, with a diameter of about 20 μm . The cytoplasm is eosinophilic and the nucleus is round or oval. Located in the center, the staining is light, there are 1 to 2 nucleoli mitochondria, which are tube-shaped and have no secretory granules. Testicular supporting cells are the main cell types present in the male testicular stroma. Their main function is to secrete and synthesize testosterone. Testosterone plays an important role in stimulating spermatogenesis, sperm maturation and maintenance of sexual function. At present, drug research targeting testicular support cells has attracted much attention. The testicular support cells cultured in vitro can directly reflect the characteristics of the action of the drug on the cells, so that separation and purification of testicular support cells becomes a necessary prerequisite.

Product characteristics:

- 1) Isolated from the normal testicular tissue of experimental animal.
- 2) Cell identification: 3β -HSD immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblasts Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Sertoli Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Cavernous Smooth Muscle Cells

CAT No: RAT/MIC/RAB-iCELL-f003

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD418/411/463

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The corpus cavernosum smooth muscle cells are not only rich in adrenergic receptors, cholinergic receptors, but also contain a variety of other energy receptors. As the most important systolic component in erectile tissue, it is the main component of penile erectile function. Under pathological conditions, the reduction of cavernous smooth muscle cells in penile erectile tissue is closely related to the occurrence of erectile dysfunction, and is consistent with the severity of clinical manifestations.

Product characteristics:

- 1) Isolated from the normal penis tissue of experimental animal.
- 2) Cell identification: α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Smooth Muscle Cell Culture System (Cat No: PriMed-iCELL-004) for the culturing of Primary Cavernous Smooth Muscle Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit, Pig) Primary

Ovarian Granulosa Cells

CAT No: RAT/MIC/RAB/PIG-iCELL-f004

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/514/571

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The ovaries are the reproductive organs of female animals. The function of the ovaries is to produce ovums as well as steroid hormones. It has a layer of epithelial tissue with a thin layer of connective tissue beneath it. The internal structure of the ovary can be divided into cortex and medulla. The cortex is located in the surrounding part of the ovary, mainly composed of follicles and connective tissue; the medulla is located in the center, composed of loose connective tissue, which has many blood vessels, lymphatic vessels and nerves.

The ovaries are the main organs that secrete estrogen. The estrogen secreted by the ovaries is mainly estradiol. Granulocytes in the ovary are places where estrogen is synthesized. The process is to convert androstenedione into estrogen: the endometrial cells under the action of LH, the cholesterol is converted to androstenedione; Granular cells produce aromatase during the development of FSH, which converts androstenedione to estrogen. The formed estrogen is secreted into the follicular fluid and blood.

Product characteristics:

- 1) Isolated from the normal ovarian tissue of experimental animal.
- 2) Cell identification: FSHR immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Ovarian Granulocyte Culture System (Cat No: PriMed-iCELL-028) for the culturing of Primary Ovarian Granulosa Cells in vitro.



MIC



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Ovarian Stromal Cells

CAT No: RAT/MIC/RAB-iCELL-f005

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD411/411/463

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The ovary is not only an organ for ovum production, growth and maturation. But also one of the target organs that secrete gonadotropins in the anterior pituitary gland. Among them, the ovarian interstitial region is an environment that provides follicular growth and development, and the ovarian stroma is mainly composed of ovarian interstitial cells. To identify the value-added and endocrine functions of ovarian stromal cells, mechanisms and regulating factors of changes in estrous cycle and pregnancy are important to further study the regulation of follicular development, ovulation, corpus luteum formation and degeneration, ovarian atrophy, pathogenesis of ovarian stromal tumors, and the mechanisms of action of hormones and cytokines involved in these physiological and pathological processes.

Product characteristics:

- 1) Isolated from the normal ovarian tissue of experimental animal.
- 2) Cell identification: P450_{scc} immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Interstitial Cell Culture System (Cat No: PriMed-iCELL-025) for the culturing of Primary Ovarian Stromal Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Oviduct Epithelial Cells

CAT No: RAT/MIC/RAB-iCELL-f006

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD600/600/651

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The fallopian tube is an important place for ovum transport, storage, capacitation, and oocyte adoption, transport, maturation, fertilization, and early embryo development. In vitro culture of oviduct epithelial cells can be used for feeder cells and co-culture with embryos to overcome the developmental arrest of embryos. Therefore, in vitro culture of oviduct epithelial cells can not only further understand the factors affecting the changes of reproductive microenvironment, but also establish a system of co-culture of oviductal epithelial cells and embryos to study the effects of oviductal epithelial cells on the development of embryos in vitro.

Product characteristics:

- 1) Isolated from the normal oviduct tissue of experimental animal.
- 2) Cell identification: CK-18 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Oviduct Epithelial Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Oviduct Smooth Muscle Cells

CAT No: RAT/MIC/RAB-iCELL-f007

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/514

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The fallopian tube is an important place for ovum transport, storage, capacitation, and oocyte adoption, transport, maturation, fertilization, and early embryo development. The fallopian tube is similar to other hollow organs, and its wall is composed of a tunica mucosa, a muscular layer and a serosa layer from the inside to the outside. Among them, the structure and thickness of the muscular layer are different due to different segments, the isthmus muscle layer is the thickest, and the lumen is also the smallest.

Product characteristics:

- 1) Isolated from the normal oviduct tissue of experimental animal.
- 2) Cell identification: α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Smooth Muscle Cell Culture System (Cat No: PriMed-iCELL-004) for the culturing of Primary Oviduct Smooth Muscle Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Endometrial Epithelial Cells

CAT No: RAT/MIC/RAB-iCELL-f008

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/514

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

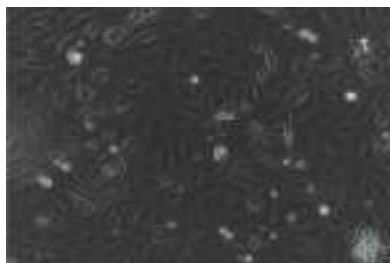
The endometrium refers to a layer that forms the inner wall of the mammalian uterus. The endometrium responds to both estrogen and progesterone, so it can change significantly with the sexual cycle (estrus cycle, menstrual cycle). The endometrium covers the mucosa and consists of the mucosal epithelium and the lamina propria below it. The mucosal epithelium is a columnar epithelium, a cubic epithelium or a multi-layered columnar epithelium. When the estrogen is secreted, each epithelial cell will grow and divide to increase the number.

Product characteristics:

- 1) Isolated from the normal uterine tissue of experimental animal.
- 1) Cell identification: PCK immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Endometrial Epithelial Cells *in vitro*.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary

Endometrial Smooth Muscle cells

CAT No: RAT/MIC/RAB-iCELL-f009

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD415/411/463

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The myometrium is thicker and consists of bundled or sliced smooth muscles separated by connective tissue. The uterine smooth muscle has a contractile function, the contraction is regulated by hormones, and its contractile activity helps the sperm to be transported to the fallopian tubes, discharged through the blood, and delivered to the fetus. The proliferation of uterine smooth muscle cells is also affected by gonadal hormones. The pathogenesis of uterine fibroids is due to the transient proliferation of uterine smooth muscle under the action of high levels of estrogen.

Product characteristics:

- 1) Isolated from the normal uterine tissue of experimental animal.
- 2) Cell identification: α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Smooth Muscle Cell Culture System (Cat No: PriMed-iCELL-004) for the culturing of Primary Endometrial Smooth Muscle cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Ovarian Surface Epithelial Cells

CAT No: RAT/MIC/RAB-iCELL-f010

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/514

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

About 85% of ovarian cancers are derived from the ovarian surface epithelium, which occurs as a multifactorial, multi-gene involved, multi-stage, and complex biological process. Therefore, in vitro culture of ovarian surface epithelial cells plays an important role in studying the function of ovarian surface epithelium and its gradual carcinogenesis. In addition, studies have shown that epidermal growth factor is very beneficial to the growth and state of ovarian surface epithelial cells.

Product characteristics:

- 1) Isolated from the normal ovarian tissue of experimental animal.
- 2) Cell identification: CK-19 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi
- 5) Cell growth pattern: Round, oval or polygonal, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Keratinocyte Culture System (Cat No: PriMed-iCELL-010) for the culturing of Primary Ovarian Surface Epithelial Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit, Pig) Primary Mammary Epithelial Cells

CAT No: RAT/MIC/RAB/PIG-iCELL-f011

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/514/571

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The breast gland is composed of 15-20 glandular leaves, each gland is divided into several glandular lobules, each gland leaflet is composed of 10-100 acinar cells, which are closely arranged around the small milk duct, the opening of the acinus is connected to the small milk duct.

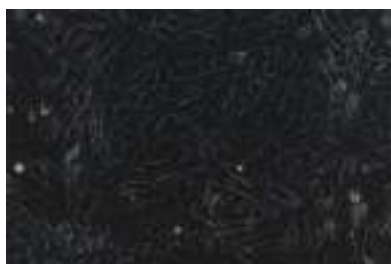
Mammary epithelial cells are derived from the lobule of the breast. Together with glandular ducts and adipose tissue, they form complex network structures in the mammary gland. Mammary epithelial cells undergo a series of growth, migration and differentiation in the birth, development and pregnancy of humans and animals. Deregulation of hormone levels, changes in extracellular matrix, and other genetic factors can cause malignant growth of mammary epithelial cells, ultimately leading to breast cancer. Understanding the characteristics of breast epithelial cells can help us understand the case mechanisms of breast cancer and identify new targets for treatment.

Product characteristics:

- 1) Isolated from the normal mammary tissue of experimental animal.
- 2) Cell identification: CK-8 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Epithelioid, polygonal cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Mammary Epithelial Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit, Pig) Primary Mammary Fibroblasts Cells

CAT No: RAT/MIC/RAB/PIG-iCELL-f012

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD415/413/463/520

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The mammary gland is located between the superficial and deep layers of the subcutaneous superficial fascia. The superficial fascia extends into the mammary gland to form a cord-like leaflet interval, one end connected to the pectoral fascia and the other end attached to the skin, and the mammary gland is fixed in the subcutaneous tissue of the chest. The mammary gland is one of the few organs in mammals that can repeatedly undergo growth, functional differentiation and degeneration. The fibrous connective tissue extends between the breast tissue to form a plurality of spaces. These fibrous connective tissues fix the breast, while the fibrous connective tissue is composed of fibroblasts.

Product characteristics:

- 1) Isolated from the normal mammary tissue of experimental animal.
- 2) Cell identification: Fibronectin or Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Mammary Fibroblasts Cells *in vitro*.



MIC



MIC

Experimental Animals (Rat, Mouse, Rabbit, Pig) Primary Ovarian Endometrial Cells

CAT No: RAT/MIC/RAB/PIG-iCELL-f013

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD486/482/543/600

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The ovary is not only an organ for ovum production, growth and maturation. But also one of the target organs that secrete gonadotropins in the anterior pituitary gland. Among them, the ovarian interstitial region is an environment that provides follicular growth and development, and the ovarian stroma is mainly composed of ovarian interstitial cells. To identify the value-added and endocrine functions of ovarian stromal cells, mechanisms and regulating factors of changes in estrous cycle and pregnancy are important to further study the regulation of follicular development, ovulation, corpus luteum formation and degeneration, ovarian atrophy, pathogenesis of ovarian stromal tumors, and the mechanisms of action of hormones and cytokines involved in these physiological and pathological processes.

Product characteristics:

- 1) Isolated from the normal ovarian tissue of experimental animal.
- 2) Cell identification: Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Endometrial Cell Culture System (Cat No: PriMed-iCELL-034) for the culturing of Primary Ovarian Endometrial Cells in vitro.



PIG



PIG

Experimental Animal (Rat, Mouse, Rabbit) Primary Endometrial Stromal Cells

CAT No: RAT/MIC/RAB-iCELL-f014

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD486/482/543

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The endometrium is composed of mucosal epithelium, gland, interstitial and blood vessels. It is the target tissue of ovarian hormones and plays an important role in reproductive physiology research. Endometriosis is a hormone-dependent disease, and the current pathogenesis has not yet been fully elucidated. The current main doctrine is the implant theory. The establishment of an in vitro model of endometrial cells is an important means to study the pathogenesis of endometrial diseases.

Product characteristics:

- 1) Isolated from the normal uterine tissue of experimental animal.
- 2) Cell identification: Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Interstitial Cell Culture System (Cat No: PriMed-iCELL-025) for the culturing of Primary Endometrial Stromal Cells in vitro.

Note:

The medium in the culture bottle is a complete medium, and the cells can be continuously cultured.



MIC



MIC

Experimental Animals (Rat, Mouse, Rabbit, Sheep) Primary Testicular Interstitial Cells

CAT No: RAT/MIC/RAB/SHE-iCELL-f015

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD486/482/543/600

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The testicular stromal cells are distributed in the seminiferous tubules. The cell bodies are round, elliptical or irregular. The cell bodies are large, with a diameter of about 20 μm . The cytoplasm is eosinophilic and the nucleus is round or oval. Located in the center, the staining is light, there are 1 to 2 nucleoli mitochondria, which are tube-shaped and have no secretory granules. Testicular supporting cells are the main cell types present in the male testicular stroma. Their main function is to secrete and synthesize testosterone. Testosterone plays an important role in stimulating spermatogenesis, sperm maturation and maintenance of sexual function. At present, drug research targeting testicular support cells has attracted much attention. The testicular support cells cultured in vitro can directly reflect the characteristics of the action of the drug on the cells, so that separation and purification of testicular support cells becomes a necessary prerequisite.

Product characteristics:

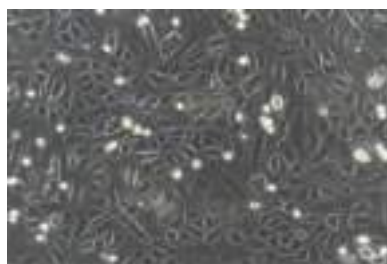
- 1) Isolated from the normal testicular tissue of experimental animal.
- 2) Cell identification: 3β -HSD immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Interstitial Cell Culture System (Cat No: PriMed-iCELL-025) for the culturing of Primary Testicular Interstitial Cells in vitro.



SHP



SHP

Experimental Animal (Rat, Mouse, Rabbit) Primary Uterine Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCELL-f016

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD531/528/577

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The uterus is the organ that produces menstruation and gestation of the fetus, located in the center of the pelvic cavity, between the bladder and the rectum. The uterine wall is composed of three layers of serosa, muscle layer and mucous membrane (endometrium) from the outside to the inside, the serosa layer is mainly composed of fibroblasts.

Product characteristics:

- 1) Isolated from the normal uterine tissue of experimental animal.
- 2) Cell identification: Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblasts Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Uterine Fibroblasts Cells in vitro.

Experimental Animal (Rat, Mouse, Rabbit) Primary Bone Cells

CAT No: RAT/MIC/RAB-iCELL-s001

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD551/551/600

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Bone cells are the main cells in mature bone tissue, which is equivalent to human adulthood and is transformed from osteoblasts. When the new bone matrix is calcified, the cells are embedded in it. At this time, the synthesis activity of the cells stops, the cytoplasm decreases, and becomes a bone cell. Bone cells can produce new matrices, change crystalloids, and stabilize calcium and phosphorus deposition and release in bone tissue to maintain blood calcium balance. Osteoblasts play a role in both bone resorption and bone formation and are the main cells that maintain the metabolism of mature bone. The bone cells are sandwiched between adjacent two layers of bone plates or dispersed in the bone plate. There is a gap junction between the protrusions of adjacent bone cells.

Product characteristics:

- 1) Isolated from the normal bone tissue of experimental animal.
- 2) Cell identification: Vonkossa chemical staining.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Oval, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Osteoblast Culture System (Cat No: PriMed-iCELL-019) for the culturing of Primary Bone Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Osteoblasts Cells

CAT No: RAT/MIC/RAB-iCELL-s002

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD379/378/429

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Osteoblasts are important cells for osteogenesis and bone formation. They have the function of synthesizing and secreting collagen and glycoproteins that make up the bone matrix, and form bone tissue through the calcified matrix. In addition, osteoblasts also play an important role in maintaining the stability of the body's environment, physiological mechanisms and bone metabolic diseases.

Product characteristics:

- 1) Isolated from the normal skull tissue of experimental animal.
- 2) Cell identification: ALP chemical staining.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Osteoblast Culture System (Cat No: PriMed-iCELL-019) for the culturing of Primary Osteoblasts Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Chondrocytes Cells

CAT No: RAT/MIC/RAB-iCELL-s003

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD379/378/429

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Chondrocytes are present in articular cartilage and are responsible for the secretion of type II collagen and other types of collagen as well as non-collagen extracellular matrix macromolecules. The proliferation and differentiation of chondrocytes are closely related to the development of vertebrate skeletons. Chondrocytes secrete and respond to a range of growth factors, including IGF-1 and IL1. In vitro cultured chondrocytes are a useful model for studying cartilage repair and arthritis pathology.

Product characteristics:

- 1) Isolated from the normal joint tissue of experimental animal.
- 2) Cell identification: Collagen II immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Chondrocyte Culture System (Cat No: PriMed-iCELL-020) for the culturing of Primary Chondrocytes Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Synovial Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCELL-s004

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD413/415/463

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Synoviocyte produce synovial fluid and plays an important role in joint activity. The normal synoviocyte is divided into two layers, namely the thin cell layer (intima layer) and the vascular layer (intima layer), which are rich in blood vessels of the joint capsule attached to the non-articular surface, covering the bone surface in the joint capsule, not on the cartilage surface, this part is called the marginal area or "bare area." Synoviocyte is reddish, smooth and flash, wet and lubricated, visible villi sometimes, containing collagenous fibers.

Synoviocyte cells have A and B types. Macrophage-like A type cells with filopodia on the surface, serosa invaginations, vesicles, mitochondria, lysosomes, cytoplasmic fibers, and Golgi apparatus, which have phagocytosis function. B type fiber Synovial cells (FLS), with a high concentration of endoplasmic reticulum, are the major cells mediating the destruction of RA joints.

Product characteristics:

- 1) Isolated from the normal joint tissue of experimental animal.
- 2) Cell identification: Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Fibroblast-like cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Synovial Fibroblasts Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Skeletal Muscle Cells

CAT No: RAT/MIC/RAB-iCELL-s005

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD377/377/429

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Skeletal muscle cells, one of the largest cell types in the body of humans and animals, are multinucleated cells formed by the fusion of myoblasts. Skeletal muscle regeneration is a complex process and requires the participation of a variety of cell signaling pathways, including phosphatidylinositol 3-kinase, calcineurin, STAT3 and MAPK. Culture of primary skeletal muscle cells is an effective model for studying cell differentiation processes.

Product characteristics:

- 1) Isolated from the normal muscle tissue of experimental animal.
- 2) Cell identification: α -actin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Skeletal Muscle Cell Culture System (Cat No: PriMed-iCELL-018) for the culturing of Primary Skeletal Muscle Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Skeletal Muscle Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCELL-s006

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD377/377/429

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Muscles can be divided into muscle abdomen and tendon. The thinner milky white ends are tendons, which are in the form of cords or flat ribbons. They are composed of parallel collagen fiber bundles. They are white and shiny, but have no contraction ability. The tendon is attached to the bone and is firmly woven with the periosteum, belonging to connective tissue. At the same time, the surface of the muscle belly is surrounded by the connective tissue outer membrane, and the two ends are fused with the tendon tissue. These connective tissues are composed of fibroblasts with support, connectivity, protection and nutritional functions.

Product characteristics:

- 1) Isolated from the normal leg muscle tissue of experimental animal.
- 2) Cell identification: Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Skeletal Muscle Fibroblasts Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Fibrous Ring Cells

CAT No: RAT/MIC/RAB-iCELL-s007

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USB463/463/514

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The annulus fibrosus, located at the periphery of the intervertebral disc, is composed of fibrocartilage. The fibers of the annulus are slanted between the vertebral bodies, arranged in a concentric annular shape on the transverse plane, and the fibers of the adjacent rings have opposite slopes and intersect each other. The annulus cells are located in front of the collagen fiber bundles, synthesize and secrete the annulus fibrosus extracellular matrix, maintaining the normal annulus structure and function.

Product characteristics:

- 1) Isolated from the normal intervertebral disc tissue of experimental animal.
- 2) Cell identification: Collagen II or Collagen I immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Polygonal, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Chondrocyte Culture System (Cat No: PriMed-iCELL-020) for the culturing of Primary Fibrous Ring Cells in vitro.

Experimental Animal (Rat, Mouse, Rabbit) Primary Nucleus Pulposus Cells

CAT No: RAT/MIC/RAB-iCELL-s008

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD514/514/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The nucleus pulposus is a milky white translucent gelatinous body that is elastic and is part of the intervertebral disc structure between the two cartilage plates and the annulus fibrosus. An elastic jelly material composed of a crisscross-shaped fibrous network structure, that is, a chondrocyte and a proteoglycan mucilage-like matrix. Premature aging and apoptosis of nucleus pulposus cells are one of the main causes of degeneration of intervertebral discs, mainly due to the decreased function and number of nucleus pulposus cells in degenerative intervertebral discs, which leads to the secretion of matrix type II and other proteins. The decrease in volume eventually leads to the loss of biomechanical function such as the height of the spine and the stress on the intervertebral disc.

Product characteristics:

- 1) Isolated from the normal intervertebral disc tissue of experimental animal.
- 2) Cell identification: Collagen II immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Spindle, polygonal, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Chondrocyte Culture System (Cat No: PriMed-iCELL-020) for the culturing of Primary Nucleus Pulposus Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Osteoclasts Cells

CAT No: RAT/MIC/RAB-iCELL-s009

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD886/886/943

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Osteoclasts (also known as bone-resorbing cells) are a type of bone tissue that perform the function of bone resorption. Osteoclasts are functionally equivalent to osteoblasts (also known as bone-forming cells). They work together to play an important role in the development and formation of bones. Highly expressed tartrate resistant acid phosphatase and cathepsin K are the major markers of osteoclasts.

Product characteristics:

- 1) Isolated from the normal joint tissue of experimental animal.
- 2) Cell identification: Tartrate-resistant acid phosphatase staining (TRAP) was positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Round, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Osteoclast Culture System (CatNo: PriMed-iCELL-032) for the culturing of Primary Osteoclasts Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Skin

Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCELL-s010

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD377/377/429

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Fibroblasts cells belong to interstitial cells differentiated from mesoderm. Since these cells are very easy to culture, they have been widely used in cell and molecular biology research. In general, fibroblasts cells are capable of secreting extracellular matrices such as type I and type III collagen, and studies have shown significant differences in fibroblasts in different organs. When the wound is repaired, Dermal fibroblasts change from a proliferative, migratory phenotype to a contractile, remodeling matrix phenotype, at the same time, they secrete a large amount of hyaluronic acid to cope with the inflammatory response during repair.

Product characteristics:

- 1) Isolated from the normal skin tissue of experimental animal.
- 2) Cell identification: Fibronectin or Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Skin Fibroblasts Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Keratinocytes Cells

CAT No: RAT/MIC/RAB-iCELL-s011

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD429/429/480

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Keratinocytes are a kind of continuously differentiated stratified squamous epithelial cell, the final stage of differentiation is to form keratin. According to the development stage and characteristics of keratinocytes, it can be divided into five layers from the inside to the outside. The basal cell layer is also called germinal layer, spinous layer, granular layer, transparent layer, and stratum corneum.

The differentiated maturation of keratinocytes appears as gradual migration from the basal layer to the stratum corneum. During a single migration process, keratin formation; the shape and function of the cells also gradually change, from the basal layer of the single-layered columnar epithelium to the stratum corneum where the flat nucleus disappears. The nascent basal cells enter the spine cell layer and then move up to the uppermost layer of the granular layer.

Product characteristics:

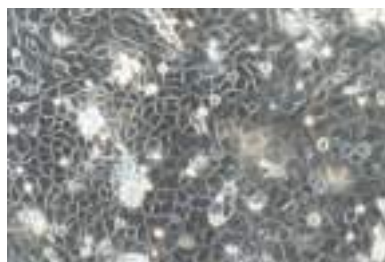
- 1) Isolated from the normal skin tissue of experimental animal.
- 2) Cell identification: Pan Cytokeratin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Epithelioid cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Keratinocytes Cell Culture System (Cat No: PriMed-iCELL-010) for the culturing of Primary Keratinocytes Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Epidermal Stem Cells

CAT No: RAT/MIC/RAB-iCELL-s012

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD522/522/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Keratinocytes have a subpopulation in the basal layer, epidermal stem cells, which produce transiently expanded cells by symmetric or asymmetric division. The transiently expanded cells become terminally differentiated epidermal keratinocytes after several generations of expansion. The epidermis can be continuously self-renewing, so epidermal stem cells have sufficient proliferative potential. Epidermal stem cells not only play a key role in homeostasis and wound repair, but also are the main targets of tumorigenesis and gene therapy.

Product characteristics:

- 1) Isolated from the normal skin tissue of experimental animal.
- 2) Cell identification: $\beta 1$ integrin and CK-19 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Keratinocytes Cell Culture System (Cat No: PriMed-iCELL-010) for the culturing of Primary Epidermal Stem Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Preadipocyte Cells

CAT No: RAT/MIC/RAB-iCELL-s013

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD521/521/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Adipose tissue has mature fat cells in the cytoplasm that accumulate lipid droplets in the body and pre-adipocytes that do not accumulate lipid droplets in the cytoplasm but have this potential. The pre-adipocytes are spindle-shaped and are a kind of pre-existing premature cells with the ability to proliferate and differentiate into adipocytes, and have a very close relationship with obesity.

Product characteristics:

- 1) Isolated from the normal adipose tissue of experimental animal.
- 2) Cell identification: Pref-1 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Preadipocyte Culture System (Cat No: PriMed-iCELL-023) for the culturing of Primary Preadipocyte Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Adipose Microvascular Endothelial Cells

CAT No: RAT/MIC/RAB-iCELL-s014

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD521/515/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

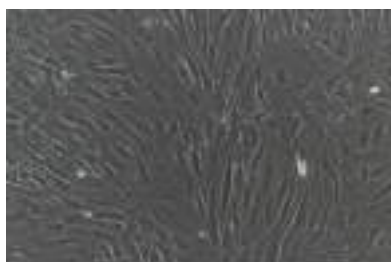
The damage of microvascular endothelial cells has been considered as the pathological basis for the development of various diseases and syndromes such as trauma, infection, shock, tumors, and vascular diseases. Once microvascular endothelial cells are damaged, they will inevitably affect or even destroy the normal biological functions of microvascular endothelial cells, causing a variety of diseases. Microvascular endothelial cell connections have a very close relationship with vascular permeability. Microvascular endothelial cells synthesize and produce prostacyclin, nitric oxide, endothelium-derived hyperpolarizing factor and endothelin to maintain the normal state of blood vessels.

Product characteristics:

- 1) Isolated from the normal adipose tissue of experimental animal.
- 2) Cell identification: vWF immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Endothelial Cell Culture System (CatNo: PriMed-iCELL-002) for the culturing of Human Adipose Microvascular Endothelial Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Dermal Papilla Cells

CAT No: RAT/MIC/RAB-iCELL-s015

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD514/514/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The dermal papillae are a group of fibroblasts, located at the base of the hair follicles. In the early stage of hair follicle development, dermal cells send a first dermal signal to monolayer epithelial cells, which stimulates the local formation of a hair substrate in the epithelium. Then the hair substrate cells send a first epidermal signal to the underlying dermis, which induces the formation of a cluster of agglutinated cells consisting of fibroblasts. During this process, the hair matrix cells gradually encapsulate the aggregated cell to form mature dermal papilla cells. As an important cell population in hair follicles, the molecular mechanisms and clinical applications of dermal papilla cells are being gradually recognized and analyzed.

Product characteristics:

- 1) Isolated from the normal skin tissue of experimental animal.
- 2) Cell identification: Fibronectin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Dermal Papilla Cells in vitro.

Experimental Animal (Rat, Mouse, Rabbit) Primary

Outer root Sheath Cells

CAT No: RAT/MIC/RAB-iCELL-s016

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD686/686/737

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The epithelium of the hair follicle is derived from the epidermis and is mainly divided into the outer root sheath and the inner root sheath. Among them, the outer root sheath corresponds to the basal layer and spinous layer of the epidermis, and consists of several layers of cells that do not contain pigment. The outer root sheath cells have a stronger proliferative activity than epidermal cells. In addition, studies have shown that insulin and EGF have a significant role in promoting the proliferation of outer root sheath cells.

Product characteristics:

- 1) Isolated from the normal skin tissue of experimental animal.
- 2) Cell identification: CK-19 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Keratinocyte Culture System (Cat No: PriMed-iCELL-010) for the culturing of Primary Outer Root Sheath Cells in vitro.

Experimental Animal (Rat, Mouse, Rabbit) Primary Hair

Follicular Keratinocytes Cells

CAT No: RAT/MIC/RAB-iCELL-s017

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD514/514/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

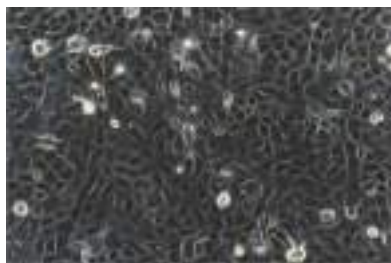
As an important skin accessory organ, the most prominent feature of hair follicles is that they are always in the cycle of growth, anaphase and rest period. In the morphological and cyclical cycle of hair follicles, the keratinocytes of hair follicles act as a special type of keratinocyte, are affected by some cytokines or signaling factors produced by the hair papilla cells, rapidly differentiated proliferation or apoptosis, then induce hair follicles to enter growth or regression period.

Product characteristics:

- 1) Isolate from the normal skin tissue of experimental animal.
- 2) Cell identification: PCK immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Keratinocyte Culture System (Cat No: PriMed-iCELL-010) for the culturing of Primary Hair Follicular Keratinocytes Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Bone Marrow Mesenchymal Stem Cells

CAT No: RAT/MIC/RAB-iCELL-s018

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/514

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Bone marrow mesenchymal stem cells are bone marrow stromal stem cells that not only have mechanical support for hematopoietic stem cells (HSC) in the bone marrow, but also secrete various growth factors (such as IL-6, IL-11, LIF, M-CSF, SCF, etc.) to support hematopoiesis. Bone mesenchymal stem cells (BMSCs) have multi-directional differentiation potential and can promote the regeneration of mesenchymal tissues such as bone, cartilage, muscle, ligament, tendon, adipose and stroma. In the bone marrow, BMSCs account for 0.001% to 0.1% of the total number of bone marrow nucleated cells, and the content is extremely low. At the same time, the technical difficulty of separating BMSCs from rodent bone marrow limits the development of many experiments due to the large number of seed cells required for tissue engineering. In vitro isolation and culture of BMSCs with high purity, strong vigor and uniform biological characteristics is essential for tissue engineering and cell in vivo and in vitro experiments.

Product characteristics:

- 1) Isolate from the normal bone marrow blood tissue of experimental animal.
- 2) Cell identification: CD44 immunofluorescence staining presented positive, CD45 immunofluorescence staining presented negative.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Mesenchymal Stem Cell Culture System (Cat No: PriMed-iCELL-012) for the culturing of Primary Bone Marrow Mesenchymal Stem Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Adipose Stem Cells

CAT No: RAT/MIC/RAB-iCELL-s019

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD521/521/578

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

According to different sources and stages of differentiation, stem cells can be divided into embryonic stem cells and adult stem cells. Embryonic stem cells have the ability to differentiate into many different tissues, but are ethically controversial. Adult stem cells have become the preferred cells for tissue engineering research due to their wide variety of sources and strong proliferation capabilities. Among them, adipose stem cells, as seed cells for tissue engineering repair, have received more and more attention due to their advantages such as rich source, easy material acquisition, and strong proliferation ability.

Adipose stem cells are similar in morphology to fibroblasts and have a strong ability to proliferate. Under certain induction conditions, it can differentiate into adipocytes, osteoblasts, chondrocytes, cardiomyocytes, epithelial cells, etc., with multi-directional differentiation potential.

Product characteristics:

- 1) Isolated from the normal adipose tissue of experimental animal.
- 2) Cell identification: CD44 immunofluorescence staining presented positive, CD45 immunofluorescence staining presented negative.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Stem Cell Culture System (Cat No: PriMed-iCELL-012) for the culturing of Primary Adipose Stem Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Synovial Mesenchymal Stem Cells

CAT No: RAT/MIC/RAB-iCELL-s020

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD509/509/577

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Synoviocyte is the inner layer of the joint capsule, reddish, smooth and flash, thin and soft, composed of loose connective tissue. All the structures in the joint cavity, except the articular cartilage and the semilunar cartilage plate, are all covered with Synoviocyte, even the tendons and ligaments that pass through the joint cavity.

Once the articular cartilage is damaged, it will be difficult to repair. The autologous chondrocyte transplantation technique is used to treat cartilage damage. The effect is better. However, due to the lack of cell source and the lesions in the material taken from the material, the application is limited.

Mesenchymal stem cells (MSCs) have the characteristics of high proliferation and multi-directional differentiation potential. Among them, the proportion of synovial mesenchymal stem cells is higher, and a small amount of specimens can obtain a sufficient amount of synovial MSCs. In addition, it has attracted more researchers to conduct in-depth research because it has better multi-differentiation ability and more colony forming ability than cartilage, osteogenesis, and fat formation of MSCs derived from bone marrow and fat.

Product characteristics:

- 1) Isolated from the normal joint tissue of experimental animal.
- 2) Cell identification: CD105 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Fibroblast-like cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Mesenchymal Stem Cell Culture System (Cat No: PriMed-iCELL-012) for the culturing of Primary Synovial Mesenchymal Stem Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary B Lymphocytes Cells

CAT No: RAT/MIC/RAB-iCELL-i001

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD657/654/737

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The progenitor cells of B lymphocytes are in the hematopoietic islands of the fetal liver. Thereafter, B lymphocyte production and differentiation sites are gradually replaced by bone marrow. The mature B cells are mainly located in the superficial lymph nodes of the lymph nodes and in the red and white marrow lymph nodes of the spleen.

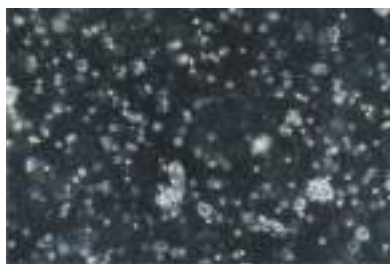
The main changes in the differentiation of B cells in the bone marrow are the rearrangement of immunoglobulin genes and the expression of membrane surface markers. In the process of development and differentiation, B cells also undergo selective action to remove non-functional gene-rearranged B cells and autoreactive B cells to form a mature B-cell bank. B cell surface has a variety of membrane surface molecules, identify antigens and interact with immune cells and immune molecules, but also an important basis for the separation and identification of B cells. The surface molecules of B cells have leukocyte differentiation antigens, MHC and a variety of membrane surface receptors.

Product characteristics:

- 1) Isolated from the normal peripheral blood tissue of experimental animal.
- 2) Cell identification: CD19 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Suspension culture.

Recommended Medium:

We recommended to use iCell Primary B Lymphocyte Culture System (Cat No: PriMed-iCELL-036) for the culturing of Primary B Lymphocytes Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary T Lymphocytes Cells

CAT No: RAT/MIC/RAB-iCELL-i002

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD766/766/851

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

T lymphocytes are derived from bone marrow pluripotent stem cells. Some of the pluripotent stem cells or pre-T cells in the bone marrow migrate into the thymus and are differentiated and matured by the induction of thymosin and become immunocompetent T cells.

T cells are quite complex and heterogeneous, and T cells can be divided into several subpopulations, of which Th cells are also called CD4+ cells because they express CD4 on the surface. It is activated by reaction with a polypeptide antigen presented by MHC II. MHCII is expressed on the surface of antigen presenting cells. Once activated, it can secrete cytokines, regulate or assist the immune response. Tc cells, also known as CD8+ cells, express CD8 on their surface. Such cells can bind directly to antigen via MHCI.

Product characteristics:

- 1) Isolated from the normal peripheral blood tissue of experimental animal.
- 2) Cell identification: CD3 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Suspension culture.

Recommended Medium:

We recommend to use iCell Primary T Lymphocyte Culture System (Cat No: PriMed-iCELL-026) for the culturing of Primary T Lymphocytes in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Mononuclear Cells

CAT No: RAT/MIC/RAB-iCELL-i003

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD657/657/737

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

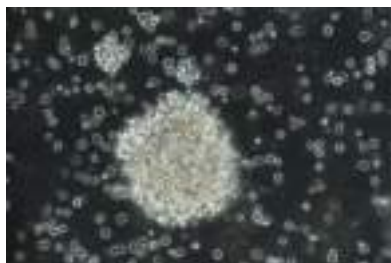
Monocytes in the blood are derived from myeloid stem cells differentiated from bone marrow stem cells and are an important part of the body's defense system. Monocytes can phagocytose foreign bodies to produce antibodies, which play an important role in the healing of the body, the invasion of pathogens and the immunity to disease. Inflammation or other diseases in the body can cause changes in the percentage of total monocytes, so checking mononuclear cell counts is an important method for assisted diagnosis.

Product characteristics:

- 1) Isolated from the normal peripheral blood tissue of experimental animal.
- 2) Cell identification: MO-1 or MO-2 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Round, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Macrophage Culture System (Cat No: PriMed-iCELL-011) for the culturing of Primary Mononuclear Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary DC Cells

CAT No: RAT/MIC/RAB-iCELL-i004

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD771/771/851

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Dendritic cells (DCs) are the most powerful professional antigen presenting cells in the body. They can efficiently ingest, process and present antigens. Immature DCs have strong migration ability and mature DCs can effectively activate initial T cells. Which are at the heart of the initiation, regulation, and maintenance of immune responses.

There are two sources of DCs: 1. The medullary stem cells differentiate into DCs under the stimulation of GM-CSF, called myeloid DCs, also known as DC1, and have common precursor cells with monocytes and granulocytes; including Langerhans cells, mesothelial (or dermal) DCs, and monocyte-derived DCs, etc. 2. Derived from lymphoid stem cells, called lymphoid DCs or plasmacytoid DCs, ie, DC2, shared same precursor cells with T cells and NK cells. The surface of dendritic cells (DCs) has abundant antigen presenting molecules, co-stimulatory factors and adhesion factors, and is a powerful professional antigen presenting cell (APC). DC itself has immune stimulating ability, and is the only APC found to activate unprimed primary T cells.

Product characteristics:

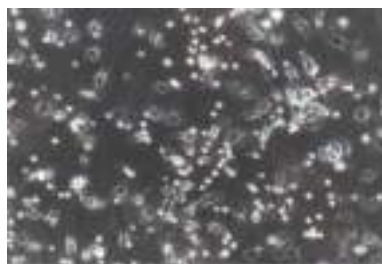
- 1) Isolated from the normal bone marrow tissue of experimental animal.
- 2) Cell identification: CD11c immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Irregular cells, semi-adherent semi-suspension culture.

Recommended Medium:

We recommended to use iCell Primary Dendritic (DC) Cell Culture System (Cat No: PriMed-iCELL-031) for the culturing of Primary DC Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Hematopoietic Stem Cells

CAT No: RAT/MIC/RAB-iCELL-i005

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD651/650/737

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Hematopoietic stem cells are stem cells in the bone marrow and have the ability to self-renew and can differentiate into various blood cells. They eventually produce various blood cell components, including red blood cells, white blood cells and platelets. Hematopoietic stem cells need to replenish the mature cell components of the blood system according to the physiological needs of the body. At the same time, hematopoietic stem cells also play a role in regulating and maintaining the physiological balance of various cellular components of the blood system in the stress state such as injury and inflammation. In clinical treatment, hematopoietic stem cell transplantation is widely applied in hematological diseases and autoimmune diseases. In the treatment of other solid tumors, such as lymphoma, germ cell tumor, breast cancer, and small cell lung cancer, it is mainly applied in patients with conventional treatment failure or recurrence and refractory factors and with poor prognostic factors.

Product characteristics:

- 1) Isolated from the normal bone marrow tissue of experimental animal.
- 2) Cell identification: CD34 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Colony growth, suspension culture.

Experimental Animal (Rat, Mouse, Rabbit) Primary NK Cells

CAT No: RAT/MIC/RAB-iCELL-i006

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD767/767/851

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Natural killer cells (NK) are important immune cells in the body, not only related to anti-tumor, anti-virus infection and immune regulation, but also involved in the occurrence of hypersensitivity and autoimmune diseases in some cases. A LAK-1 molecule stably expressed on the surface of NK and LAK cells. After 120 kDa NK cells were cultured for 20 days, LAK-1 was still positive, while HNK-1 (CD57) and CD16 partially disappeared. The killing activity of LAK can be inhibited by anti-LAK-1 McAb.

Natural killer cell stimulatory factor (NKSF) has a stimulating effect on NK cells. IL-2, IL-12, IFN- α , TNF- α , and leukoregulin (LR) have positive regulating effect on the activation and differentiation of NK cells. In vitro culture, adding the above cytokines can significantly increase the killing activity of NK. Prostaglandins (PG) E1, E2, D2, and adrenocorticotrophic hormone have inhibitory effects on the activity of NK cells.

Product characteristics:

- 1) Isolated from the normal peripheral blood tissue of experimental animal.
- 2) Cell identification: CD56 and CD16 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Round or oval, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary NK Cells Culture System (Cat No: PriMed-iCELL-033) for the culturing of Primary NK Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Endothelial Progenitor Cells

CAT No: RAT/MIC/RAB-iCELL-i007

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD789/789/840

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Endothelial progenitor cells are the precursor cells of vascular endothelial cells. Under the stimulation of physiological or pathological factors, the repair of injured vessels from bone marrow to peripheral blood shows that endothelial progenitor cells play an important role in cardiovascular and cerebrovascular diseases, peripheral vascular diseases, tumor angiogenesis and wound healing. And provided new ideas for research and treatment of ischemic diseases.

Endothelial progenitor cells have migration characteristics and can further differentiate into immature endothelial cells, lacking the characteristic phenotype of mature endothelial cells and failing to form lumen-like structures. Its function is mainly involved in the post-natal ischemic tissue angiogenesis and repairing after vascular injury.

Product characteristics:

- 1) Isolated from the normal bone marrow blood tissue of experimental animal.
- 2) Cell identification: CD3 and CD34 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Endothelial Progenitor Cell Culture System (Cat No: PriMed-iCELL-013) for the culturing of Primary Endothelial Progenitor Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Thymic Epithelial Cells

CAT No: RAT/MIC/RAB-iCELL-i008

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD600/600/651

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The thymus is an important lymphoid organ of the body. Its function is closely related to immunity. It is a place where T cells differentiate, develop and mature. It also secretes thymus hormones and hormones, and has organs with endocrine skills. Thymic epithelial cells and thymocytes are important components of the thymus microenvironment. In addition, thymic epithelial cells constitute the three-dimensional structure of different developmental stages of thymocytes. According to their different positions in the thymus, they can be divided into cortical thymus epithelial cells and medulla. Thymic epithelial cells. The development and maturation of thymocytes is accomplished by interactions during the migration of thymic cortex and medullary epithelial cells. In addition, thymocytes develop through cortical thymic epithelial cell-mediated positive selection and medullary thymic epithelial cell-mediated negative selection into mature T lymphocytes that recognize and tolerate their major histocompatibility complex and autoantigen.

Product characteristics:

- 1) Isolated from the normal thymus tissue of experimental animal.
- 2) Cell identification: PCK immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Thymic Epithelial Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Thymic Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCELL-i009

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD411/411/463

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The thymus is an important lymphoid organ of the body. Its function is closely related to immunity. It is a place where T cells differentiate, develop and mature. It also secretes thymus hormones and hormones, and has organs with endocrine skills. The surface of the thymus has a connective tissue envelope, the connective tissue extends into the thymus parenchyma and divides the thymus into a number of incompletely separated leaflets. These connective tissue tissues are composed of fibroblasts, which serve as supporting cells to protect and support other cells.

Product characteristics:

- 1) Isolated from the normal thymus tissue of experimental animal.
- 2) Cell identification: Fibronectin or Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Thymic Fibroblasts Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Spleen Stromal Cells

CAT No: RAT/MIC/RAB-iCELL-i010

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD377/377/429

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The spleen is an important lymphoid organ with functions such as hematopoiesis, blood filtration, removal of senescent blood cells, and participation in immune responses. It is also an important place for lymphocyte migration and immune response to occur after antigen stimulation. The spleen stromal cells are connective tissue cells in the spleen, which provide support and nutrients for the parenchymal cells in the spleen.

Product characteristics:

- 1) Isolated from the normal spleen tissue of experimental animal.
- 2) Cell identification: Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Spleen Stromal Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Spleen-derived Endothelial Progenitor Cells

CAT No: RAT/MIC/RAB-iCELL-i011

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD789/789/840

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The spleen is an important lymphoid organ with functions such as hematopoiesis, blood filtration, removal of senescent blood cells, and participation in immune responses. It is also an important place for lymphocyte migration and immune response to occur after antigen stimulation. Endothelial progenitor cells have migratory characteristics, can further proliferate and differentiate into naive endothelial cells, lack the characteristic phenotype of mature endothelial cells, and cannot form a lumen-like structure. Its function is mainly involved in the repair of post-natal ischemic tissue angiogenesis and vascular injury.

Product characteristics:

- 1) Isolated from the normal spleen tissue of experimental animal.
- 2) Cell identification: CD31 and CD34 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Endothelial Progenitor Cell Culture System (Cat No: PriMed-iCELL-013) for the culturing of Primary Spleen-derived Endothelial Progenitor Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Lymphatic Endothelial Cells

CAT No: RAT/MIC/RAB-iCELL-i012

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD566/566/617

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The lymphatic vessels are formed by the confluence of the capillary lymphatics. The morphological structure is similar to that of vein, but the diameter is thin and the tube wall is thin. Lymphatic vessels are divided into light and deep according to their location. They are located subcutaneously, often accompanied by superficial veins, collecting the lymph of the skin and subcutaneous tissue. Lymphatic vessels usually pass through one or more lymph nodes during the centripetal stroke, thereby bringing lymphocytes into the lymph fluid. The lymphatic system plays an important role in maintaining the stability of the human body's environment, draining body fluids in the interstitial space and the function of the immune system. These functions are closely related to the function of lymphatic endothelial cells. At the same time, in the course of inflammation and tumors, lymphangiogenesis is involved in the repair of tissues and the metastasis of tumors.

Product characteristics:

- 1) Isolated from the normal lymphatic tissue of experimental animal.
- 2) Cell identification: vEGFR-3 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Endothelial Cell Culture System (Cat No: PriMed-iCELL-002) for the culturing of Primary Lymphatic Endothelial Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Lymphatic Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCELL-i013

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/514

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

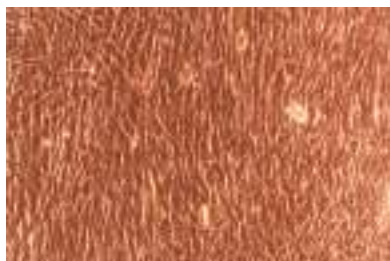
The lymphatic vessels are formed by the confluence of the capillary lymphatics. The morphological structure is similar to that of vein, but the diameter is thin and the tube wall is thin. Lymphatic vessels are divided into light and deep according to their location. They are located subcutaneously, often accompanied by superficial veins, collecting the lymph of the skin and subcutaneous tissue. Lymphatic vessels usually pass through one or more lymph nodes during the centripetal stroke, thereby bringing lymphocytes into the lymph fluid. The lymphatic system plays an important role in maintaining the stability of the human body's environment, draining body fluids in the interstitial space and the function of the immune system. There are connective tissues on the outside of the lymphatic vessels. These connective tissues are composed of fibroblasts, which protect and support the lymphatic vessels.

Product characteristics:

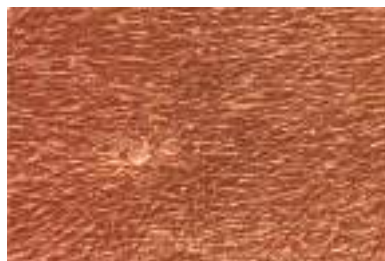
- 1) Isolated from the normal lymphatic tissue of experimental animal.
- 2) Cell identification: Fibronectin or Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Lymphatic Vessel Fibroblasts Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Bone Marrow Mast Cells

CAT No: RAT/MIC/RAB-iCELL-i014

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD783/783/829

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Mast cell (MC) is a tissue cell with strong basophilic granules, like the basophils of blood. The nucleus is small and located in the center of the cell.

MC secretes a variety of cytokines and is involved in immune regulation. In addition, MHC molecules, B7 molecules are also expressed. Studies have shown that MC plays an important role in the pathogenesis of hypersensitivity reactions such as bronchial asthma, and plays a role in autoimmune diseases such as multiple sclerosis and rheumatoid arthritis.

Product characteristics:

- 1) Isolated from the normal bone marrow tissue of experimental animal.
- 2) Cell identification: CD117 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Round or oval cells, suspension culture.

Recommended Medium:

We recommended to use iCell Primary Mast Cell Culture System (Cat No: PriMed-iCELL-029) for the culturing of Primary Primary Bone Marrow Mast Cells in vitro.

Experimental Animal (Rat, Mouse, Rabbit) Primary Bone Marrow Mononuclear Cells

CAT No: RAT/MIC/RAB-iCELL-i015

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD766/771/851

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Monocytes are derived from myeloid stem cells differentiated from bone marrow stem cells and are an important component of the body's defense system. Monocytes can phagocytose foreign bodies to produce antibodies, which play an important role in the healing of the body, the invasion of pathogens and the immunity to disease. Inflammation or other diseases in the body can cause changes in the percentage of total monocytes, so checking mononuclear cell counts is an important method for assisted diagnosis.

Product characteristics:

- 1) Isolated from the normal bone marrow tissue of experimental animal.
- 2) Cell identification: MO-1 or MO-2 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Round, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Macrophage Culture System (Cat No: PriMed-iCELL-011) for the culturing of Primary Bone Marrow Mononuclear Cells in vitro.

Experimental Animal (Rat, Mouse, Rabbit) Primary Spleen Lymphocytes Cells

CAT No: RAT/MIC/RAB-iCELL-i016

Size/Quantity: Each vial contains $>1 \times 10^6$ cells in 1ml volume

Price: USD497/494/554

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Spleen is an important lymphoid organ, which has functions of hematopoiesis, filtering blood, clearing old blood cells and participating in immune reaction. It is also an important place for immune response and production of immune effector molecules after lymphocyte migration and antigen stimulation. The spleen is the body's largest immune organ, accounting for 25% of the total body's lymphoid tissue, and contains a large number of lymphocytes and macrophages. It is the center of cellular and humoral immunity.

Product characteristics:

- 1) Isolated from the normal spleen tissue of experimental animal.
- 2) Cell identification: lymphocytes are mixed systems, so purity identification is impossible.
- 3) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 4) Cell growth pattern: Suspension growth.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Bone Marrow Macrophage Cells

CAT No: RAT/MIC/RAB-iCELL-i017

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD771/768/829

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Macrophages are derived from mononuclear cells and belong to immune cells. They have a variety of functions, belong to non-proliferating cell populations and are difficult to cultivate for a long time.

Macrophages play a wide range of biological roles in phagocytosis and clearance of foreign bodies and senescent dead cells, secretion of biologically active substances, regulation of hematopoiesis and participation in immune responses, are a class of cells that play an important immune effect in the body, providing protection for homeostasis maintenance and tissue defense.

Product characteristics:

- 1) Isolated from the normal bone marrow tissue of experimental animal.
- 2) Cell identification: CD68 and MAC387 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Round, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Macrophage Culture System (Cat No: PriMed-iCELL-011) for the culturing of Primary Bone Marrow Macrophage Cells in vitro.

Experimental Animal (Rat, Mouse, Rabbit) Primary Cerebral Microvascular Endothelial Cells

CAT No: RAT/MIC/RAB-iCELL-n001

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD429/429/480

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Brain microvascular endothelial cells are the main components of the blood-brain barrier and can limit the entry of soluble substances and cells into the brain from the blood. Brain microvascular endothelial cells have some of the same characteristics as peripheral endothelial cells.

There are many cell-to-cell tight junctions in brain microvascular endothelial cells that produce high transendothelial impedance and delayed fluxes of the cells. The endothelial cells of the brain microvessels are tightly connected, unlike the vascular endothelial cells of other tissues, which have a large gap. The brain microvascular endothelial cells lack the window structure of the endothelial cells, and the level of liquid phase material pinocytosis is lower. Brain microvascular endothelial cells have asymmetrically localized enzymes and vector-mediated transport systems, resulting in a “polarized” phenotype. Similar to endothelial cells, cell adhesion molecules are expressed on the surface of cerebral microvascular endothelial cells, regulating white blood cells into the brain. Due to the organ-specificity of microvascular endothelial cells, endothelial cells are usually isolated from relevant tissues of disease research.

Product characteristics:

- 1) Isolated from the normal cerebral artery tissue of experimental animal.
- 2) Cell identification: vWF immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Endothelial Cell Culture System (Cat No: PriMed-iCELL-002) for the culturing of Primary Cerebral Microvascular Endothelial Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Cerebral Artery Endothelial Cells

CAT No: RAT/MIC/RAB-iCELL-n002

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD583/583/634

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The cerebral artery is a muscular artery with a thin wall and no supporting tissue around the blood vessel. However, the cerebral arterial intima is thick and has a developed internal elastic membrane.

Angiogenesis is a process in which endothelial cells of the original vascular system proliferate and migrate to form new branches of progeny blood vessels. Cerebral arterial regeneration can rebuild an effective blood supply, thereby improving cerebral ischemia caused by multiple, diffuse cerebral atherosclerosis, and ultimately preventing dementia and cerebral infarction.

Product characteristics:

- 1) Isolated from the normal cerebral artery tissue of experimental animal.
- 2) Cell identification: vWF immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Endothelial Cell Culture System (Cat No: PriMed-iCELL-002) for the culturing of Primary Cerebral Artery Endothelial Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Cerebrovascular Cells

CAT No: RAT/MIC/RAB-iCELL-n003

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/514

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Cerebral perivascular cells are distributed in the microvasculature of brain tissue, key factors of regulating angiogenesis, stability, and function. Pericytes are typically characterized by a prominent nucleus with less cytoplasm around the nucleus and many protrusions parallel to the long axis of the microvessel, which taper and surround the microvascular lumen to support the lumen. At the same time, one pericyte can be contacted with multiple capillaries in the microcirculation through the extended projections. In addition, the interaction between pericytes and endothelial cells plays an extremely important role in angiogenesis.

Product characteristics:

- 1) Isolated from the normal brain tissue of experimental animal.
- 2) Cell identification: α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Peripheral Cell Culture System (Cat No: PriMed-iCELL-015) for the culturing of primary Cerebrovascular Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Meningeal Cells

CAT No: RAT/MIC/RAB-iCELL-n004

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD381/381/429

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The meninges is a layer of transparent membrane that is tightly attached to the surface of the brain and the inner surface of the brain, which contains abundant blood vessels. The choroid plexus is formed in the ventricle and ependymal epithelium, producing cerebrospinal fluid. Meningeal lesions lead to changes in cerebrospinal fluid dynamics, resulting in increased pressure in the cerebrospinal fluid, eventually leading to hydrocephalus. At present, the study on the pathogenesis of hydrocephalus suggests that CSF may be closely related to meningeal fibrosis. Meningeal cells are the main cells that constitute meningeal fibrosis.

Product characteristics:

- 1) Isolated from the normal brain tissue of experimental animal.
- 2) Cell identification: Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Meningeal Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Cerebral Cortical Neuron Cells

CAT No: RAT/MIC/RAB-iCELL-n005

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD691/691/743

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Neurons, also known as neurons, are the basic units that make up the structure and function of the nervous system.

Neurons are cells with long synapses (axons), which consist of cell bodies and cell protrusions. A sheath is sheathed on long axons and forms nerve fibers. The tiny branches at the ends are called nerve endings. The cell body is located in the brain, spinal cord, and ganglion, and the cell protrusion can extend into various organs and tissues throughout the body.

Product characteristics:

- 1) Isolated from the normal brain tissue of experimental animal.
- 2) Cell identification: NSE immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Neuronal Cell Culture System (Cat No: PriMed-iCELL-005) for the culturing of Primary Cerebral Cortical Neuron Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Hippocampal Neuron Cells

CAT No: RAT/MIC/RAB-iCELL-n006

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD726/726/777

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The hippocampus is mainly responsible for memory and learning, and short-term memories in daily life are stored in the hippocampus.

Neurons are the basic unit of structure and function of the nervous system. Neurons are cells with long synapses (axons), which consist of cell bodies and cell protrusions.

Product characteristics:

- 1) Isolated from the normal brain tissue of experimental animal.
- 2) Cell identification: NSE immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Neuronal Cell Culture System (Cat No: PriMed-iCELL-005) for the culturing of Primary Hippocampal Neuron Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Spinal Neuron Cells

CAT No: RAT/MIC/RAB-iCELL-n007

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD800/800/886

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The spinal cord is part of the central nervous system and is located in the spinal canal composed of the vertebrae and has a long cylindrical shape.

Neurons are the basic unit of structure and function of the nervous system. Neurons are cells with long synapses (axons), which consist of cell bodies and cell protrusions.

Product characteristics:

- 1) Isolated from the normal spinal cord tissue of experimental animal.
- 2) Cell identification: NSE immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Neuronal Cell Culture System (Cat No: PriMed-iCELL-005) for the culturing of Primary Spinal Neuron Cells *in vitro*.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Schwann Cells

CAT No: RAT/MIC/RAB-iCELL-n008

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD566/566/617

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Schwann cells are distributed along the protrusions of neurons and are wrapped on nerve fibers. The outer surface of Schwann cells has a basement membrane that secretes neurotrophic factors, promotes the survival of damaged neurons and axon regeneration and participate in the formation of nerve fibers in the peripheral nervous system. Studies have shown that the neurons are very selective to the substrate they are contacting when they extend, and once contacting with Schwann cells, the extension of nerve fibers will be strictly confined within the Bungner zone.

Product characteristics:

- 1) Isolated from the normal sciatic nerve tissue of experimental animal.
- 2) Cell identification: S100 or GFAP immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Schwann Cell Culture System (Cat No: PriMed-iCELL-016) for the culturing of Primary Schwann Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Astrocyte Cells

CAT No: RAT/MIC/RAB-iCELL-n009

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD514/518/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Astrocyte is the largest volume of glial cells. A number of long, branched protrusions are emitted from the cell body, which are stretched between the cell bodies of the nerve cells, support and separate the nerve cells.

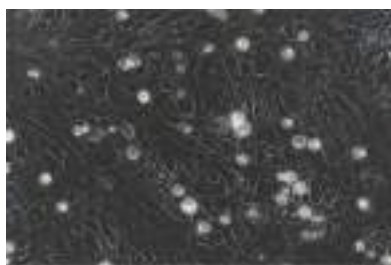
Fibrous astrocytes are mostly distributed in the cortex of the cerebrospinal cord, with slender protrusions, few branches, cytoplasmic inclusions, mostly distributed in gray matter, short cell protrusions with many branches. There are fewer cytoplasmic colloidal filaments, also known as mossy cells. Under the electron microscope, the nucleus of astrocyte was deleted, the cytoplasm was clear, the free ribonucleoprotein and rough endoplasmic reticulum were few, the glycogen granules were abundant, and there were a lot of colloidal filaments. The protrusions of fibrous star-shaped glial cells are long cylindrical, while the protuberances of protoplast astrocytes are flaky and often envelop nerve cells and their synapses. The plate of the star glial cells is separated from the vascular endothelial cells by a substrate, and the plasma membrane of the foot plate has a semi-bridged structure at the contact with the substrate.

Product characteristics:

- 1) Isolated from the normal brain tissue of experimental animal.
- 2) Cell identification: GFAP immunofluorescence staining.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Stellate cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Astrocyte Culture System (Cat No: PriMed-iCELL-007) for the culturing of Primary Retinal Muller Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Microglia Cells

CAT No: RAT/MIC/RAB-iCELL-n010

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD514/518/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

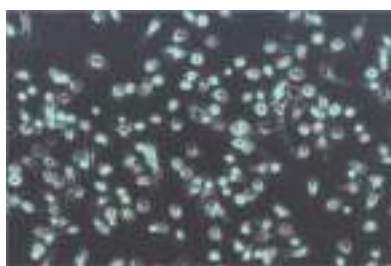
Microglia are distributed throughout the central nervous system and are the smallest glial cells, accounting for approximately 5-10% of the entire glial cells. As resident immune effector cells of the central nervous system, microglia and its mediated neuroinflammation play a very important role in the damage of the central nervous system and the outcome of the disease.

Product characteristics:

- 1) Isolated from the normal brain tissue of experimental animal.
- 2) Cell identification: CD68 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Round, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Astrocyte Culture System (Cat No: PriMed-iCELL-007) for the culturing of Primary Microglia Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Oligodendrocyte Cells

CAT No: RAT/MIC/RAB-iCELL-n011

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD543/539/600

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

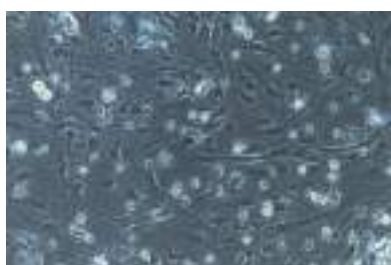
Oligodendrocytes are an important component of glial cells in the central nervous system. Their main function is to form a myelin sheath around the axons of neurons, assist in the efficient transfer of neuroelectric models, maintain and protect the normal function of neurons. In addition, oligodendrocytes also have the function of synthesizing and secreting various cytokines to promote the development and survival of neurons and glial cells.

Product characteristics:

- 1) Isolated from the normal brain tissue of experimental animal.
- 2) Cell identification: MBP immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Round or oval cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Oligodendrocyte Culture System (Cat No: PriMed-iCELL-006) for the culturing of Primary Microglia Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Neuroglia Cells

CAT No: RAT/MIC/RAB-iCELL-n012

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD517/514/574

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Neuroglia Cells are widely distributed in the central nervous system and are all cells except neurons. The number of neurons in the central nervous system is approximately ten times that of neurons. Has the role of supporting and nourishing neurons.

The glial cells, same as e neurons, also have cell bulges, but their cytoplasm does not differentiate between dendrites and axons.

Astrocytes are the largest in glial cells. Many long and branched protrusions are emitted from the cell body, stretched and filled between the cell bodies of the nerve cells and their projections, supporting and separating nerve cells.

Product characteristics:

- 1) Isolated from the normal brain tissue of experimental animal.
- 2) Cell identification: GFAP immunofluorescence staining.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Spindle cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Astrocyte Culture System (Cat No: PriMed-iCELL-007) for the culturing of Primary Neuroglia Cells *in vitro*.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Cerebral Artery Smooth Muscle Cells

CAT No: RAT/MIC/RAB-iCELL-n013

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD583/583/629

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

A major factor in the development and progression of vascular disease is the transformation of vascular smooth muscle cells (SMCs) into a reproductive phenotype. Recent studies have shown that smooth muscle cells express calcium channels, ICAM-1 and VCAM-1. The expression of ICAM-1 and VCAM-1 may be the cause of inflammation of the blood vessel wall and further cause vascular disease. Therefore, in vitro culture and study of vascular smooth muscle cells can be used to identify and identify targeted therapeutic approaches for new vascular diseases.

Product characteristics:

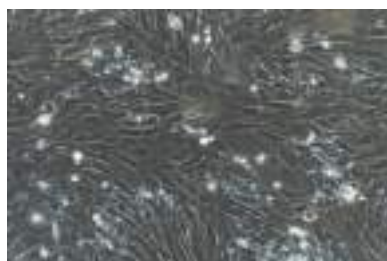
- 1) Isolated from the normal aortic tissue of experimental animal.
- 2) Cell identification: α -SMA immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Smooth Muscle Cell Culture System (Cat No: PriMed-iCELL-004) for the culturing of Primary Cerebral Artery Smooth Muscle Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Cerebral Cortical Neural Stem Cells

CAT No: RAT/MIC/RAB-iCELL-n014

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD749/745/806

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Neural stem cells (NSCs) are cells in mammals that have multi-directional differentiation potential and self-renewal potential. They can differentiate into neurons and glial cells, and have vast potential for alternative therapy in diseases of the nervous system.

Product characteristics:

- 1) Isolated from the normal brain tissue of experimental animal.
- 2) Cell identification: Nestin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Colonies, cloned globular, semi-adherent semi-suspended culture.

Recommended Medium:

We recommended to use iCell Primary Neuronal Cell Culture System (Cat No: PriMed-iCELL-005) for the culturing of Primary Cerebral Cortical Neural Stem Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Cerebrovascular Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCELL-n015

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/459/520

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

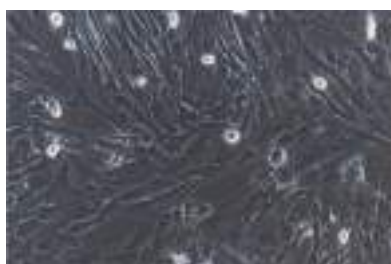
The cerebral blood vessels are composed of the inner membrane, the middle elastic layer and the outer membrane, and the three layers are closely attached together. Among them, the outer membrane is a specialized supporting tissue composed of connective tissue, and the main component is fibroblasts cells, which plays an important role in vascular inflammation reaction and vascular remodeling.

Product characteristics:

- 1) Isolated from the normal brain tissue of experimental animal.
- 2) Cell identification: Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblasts Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Cerebrovascular Fibroblasts Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary DRG Neuronal Cells

CAT No: RAT/MIC/RAB-iCELL-n016

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD771/654/714

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

DRG is the primary sensory center of the body and is rich in sensory neurons of the peripheral nervous system.

Neurons are the basic unit of structure and function of the nervous system. Neurons have long processes that are composed of cell bodies and cell processes.

Product characteristics:

- 1) Isolated from the normal spinal cord tissue of experimental animal.
- 2) Cell identification: NSE immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Neuronal Cell Culture System (Cat No: PriMed-iCELL-005) for the culturing of Primary DRG Neuronal Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Hypothalamic Neuron Cells

CAT No: RAT/MIC/RAB-iCELL-n017

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD657/654/714

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The hypothalamus is a component of the diencephalon and is the central regulator of visceral and endocrine activity.

Neurons are the basic unit of structure and function of the nervous system. Neurons have long processes that are composed of cell bodies and cell processes.

Product characteristics:

- 1) Isolated from the normal brain tissue of experimental animal.
- 2) Cell identification: NSE immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Neuronal Cell Culture System (Cat No: PriMed-iCELL-005) for the culturing of Primary DRG Neuronal Cells in vitro.



MIC



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Corneal Epithelial Cells

CAT No: RAT/MIC/RAB-iCELL-m001

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD515/517/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The cornea is a transparent membrane located on the anterior wall of the eyeball, accounting for about 1/6th of the fibrous membrane. It is round when viewed from the back and is horizontal oval when viewed from the front. Corneal thickness is different in each part, the center is thinnest. The cornea is divided into five layers, from the anterior to the posterior, there are: epithelial cell layer, anterior elastic layer, stromal layer, posterior elastic layer, and endothelial cell layer.

In vitro culture of corneal epithelial cells is an extremely important tool for studying the physiology, pathology, immunology and molecular biology of cornea. It is often applied to study the effects of cell metabolites, viral infections, various growth factors and drugs on cell growth.

Product characteristics:

- 1) Isolated from the normal eye tissue of experimental animal.
- 2) Cell identification: PCK immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Epithelioid, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Corneal Epithelial Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Corneal Stromal Cells

CAT No: RAT/MIC/RAB-iCELL-m002

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/514

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The cornea is a transparent membrane located on the anterior wall of the eyeball, accounting for about 1/6th of the fibrous membrane. It is round when viewed from the back and is horizontal oval when viewed from the front. Corneal thickness is different in each part, the center is thinnest. The cornea is divided into five layers, from the anterior to the posterior, there are: epithelial cell layer, anterior elastic layer, stromal layer, posterior elastic layer, and endothelial cell layer.

The corneal stroma is the middle connective tissue, completely transparent. The main cellular component in the corneal stroma is the corneal stromal cells, which can synthesize and secrete fibers and play a role in the arrangement and balance of collagen bundles.

Product characteristics:

- 1) Isolated from the normal eye tissue of experimental animal.
- 2) Cell identification: Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Corneal Stromal Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Retinal Pigment Epithelial Cells

CAT No: RAT/MIC/RAB-iCELL-m003

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD517/517/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The retinal pigment epithelium is located between the choroid and the extracellular junction of photoreceptors. It is the transport channel of ions, water, nutrients and metabolic end products between the subretinal and choroidal vessels. The retinal pigment epithelium participates in the retinol cycle, engulfs the detached photoreceptor extracellular nodes to maintain photoreceptor cell excitability, and secretes multiple growth factors to help maintain the structural integrity of choroidal vascular endothelial cells and photoreceptor cells.

Product characteristics:

- 1) Isolated from the normal eye tissue of experimental animal.
- 2) Cell identification: CK-8 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Epithelioid, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Retinal Pigment Epithelial Cells in vitro.



RAT



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Lens Epithelial Cells

CAT No: RAT/MIC/RAB-iCELL-m004

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD515/514/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

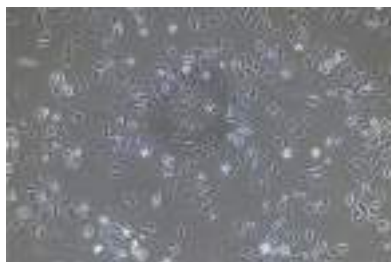
Mammalian lenses mainly composed of two types of cells: the lens fibroblasts that form the body and monolayer epithelial cells that cover the anterior surface of the lens. The lens epithelial cells are mainly responsible for regulating the physiological balance of the lens, including the transport of electrolytes and fluids. During the normal development, lens epithelial cells differentiate and mature, then migrate into the interior of the lens, producing crystal proteins, and themselves elongate into lens fiber cells, and eventually lose the nucleus and other organelles. Studies have shown that the differentiation and polarization of lens epithelial cells are regulated by growth factors in the ocular fluids, including epidermal growth factor and insulin.

Product characteristics:

- 1) Isolated from the normal eye tissue of experimental animal.
- 2) Cell identification: CK-18 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Epithelioid, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Lens Epithelial Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Conjunctival Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCell-m005

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD463/463/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Conjunctivoxalasis (CCh) is due to excessive relaxation of the bulbar conjunctiva and/or high tension of the inferior temporal margin, causing the loosening of the conjunctiva to accumulate between the eyeball and the inferior temporal margin, between the inner and outer iliac crests, forming wrinkles, causing ocular surface tears. Abnormal distribution, accompanied by eye irritation such as tears, dryness, foreign body sensation and other symptoms of eye disease. Studies have shown that changes in conjunctival fibroblasts in conjunctival relaxation, affecting the balance and stability of extracellular matrix components, may be the cause of conjunctival relaxation.

Product characteristics:

- 1) Isolated from eyeballs of experimental animals.
- 2) Cell identification: Desmin or Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Conjunctival Fibroblasts Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Conjunctival Epithelial Cells

CAT No: RAT/MIC/RAB-iCell-m006

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD514/514/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Conjunctival epithelium is an important component of the ocular surface and is the protective barrier of the ocular surface. It plays an important role in maintaining the stability of the tear film, lubricating the ocular surface, maintaining the normal vision and repairing ocular surface epithelial damage. In the 1990s, with the in-depth study of the ocular surface, the concept of conjunctival epithelial stem cells was proposed, and the self-renewal of conjunctival epithelial cells was derived from conjunctival epithelial stem cells.

Product characteristics:

- 1) Isolated from eyeballs of experimental animals.
- 2) Cell identification: PCKimmunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Flat oval, fusiform or irregular, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Conjunctival Epithelial Cells in vitro.



RAB



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Choroidal Microvascular Endothelial Cells

CAT No: RAT/MIC/RAB-iCELL-m007

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD600/600/686

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Choroidal neovascularization (CNV) has become one of the research hotspots in the field of ophthalmology. At present, most of the cells applied in vitro are readily available macrovascular endothelial cells, such as human umbilical vein endothelial cells or aortic endothelial cells. Since the vascular endothelial cells have organ-specificity and tissue-specificity, it is difficult to objectively and accurately explain the mechanism of occurrence of CNV using the results of studies on macrovascular endothelial cells. Therefore, the establishment of an in vitro culture system of choroidal microvascular endothelial cells (CEC) has great value for the in-depth study of CNV-related diseases.

Product characteristics:

- 1) Isolated from the normal eye tissue of experimental animal.
- 2) Cell identification: CD34、CD31 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Cobblestone-like, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Endothelial Cell Culture System (Cat No: PriMed-iCELL-002) for the culturing of Primary Choroidal Microvascular Endothelial Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Choroidal Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCELL-m008

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD600/600/629

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

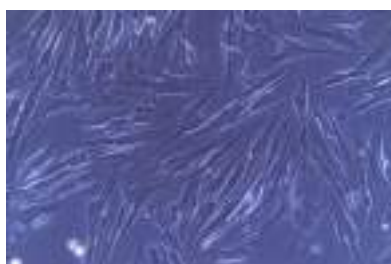
Choroidal neovascularization (CNV) has become one of the research hotspots in the field of ophthalmology. There is connective tissue on the outside of the blood vessel, and the connective tissue is composed of fibroblasts to support and protect.

Product characteristics:

- 1) Isolated from the normal eye tissue of experimental animal.
- 2) Cell identification: Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Choroidal Fibroblasts Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Retinal Microvascular Endothelial Cells

CAT No: RAT/MIC/RAB-iCELL-m009

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD514/518/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Diabetic retinopathy, age-related macular degeneration and other retinal diseases are closely related to the pathological changes of retinal vessels. With the deep research on retinal vascular diseases, it was found that the retinal vascular endothelial cells are the key cells of this disease. By in vitro isolation and culture of primary retinal microvascular endothelial cells to obtain a large number of highly purified endothelial cells, is a reliable in vitro model for the study of retinal vascular diseases.

Product characteristics:

- 1) Isolated from the normal eye tissue of experimental animal.
- 2) Cell identification: PECAM-1/CD31 or vWF immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Cobblestone-like, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Endothelial Cell Culture System (Cat No: PriMed-iCELL-002) for the culturing of Primary Retinal Microvascular Endothelial Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Periodontal Ligament Fibroblasts Cells

CAT No: RAT/MIC/RAB-iCell-m010

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD411/411/463

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The periodontal ligament consists of dense connective tissue, which contains nerves, blood vessels, lymph and epithelial cells.

Periodontal ligament fibroblasts are the most important cells in the periodontal ligament. Its function is to participate in the synthesis and absorption of collagen, so that the collagen in the periodontal membrane can be continuously updated; also related to the formation of stroma.

As the main cells of the periodontal ligament, it participate in the process of lesion, repair and regeneration of periodontal tissue. Nowadays, applying periodontal ligament cells to establish in vitro models has become an important means for researchers to study periodontal tissue diseases.

Product characteristics:

- 1) Isolated from the normal tooth tissue of experimental animal.
- 2) Cell identification: Fibronectin or Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Fibroblast-like cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Periodontal Ligament Fibroblasts Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Periodontal Ligament Stem Cells

CAT No: RAT/MIC/RAB-iCell-m011

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD515/520/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Periodontal disease is a common and frequently-occurring disease in oral diseases and often leads to destruction or defect of periodontal supporting tissues. At present, periodontal support tissue reconstruction mainly relies on mechanical, drug or guided tissue regeneration techniques. With the rapid development of molecular biology, tissue engineering and stem cell technology, periodontal tissue regeneration engineering technology has become a hot topic in the treatment of periodontal disease. Periodontal ligament stem cells (PDLSCs) are one of the key cells for periodontal tissue regeneration. Therefore, research on periodontal ligament stem cells has gradually become a hot topic.

Product characteristics:

- 1) Isolated from the normal tooth tissue of experimental animal.
- 2) Cell identification: CD146 or STRO-1 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Fibroblast-like cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Mesenchymal Stem Cell Culture System (Cat No: PriMed-iCELL-012) for the culturing of Primary Periodontal Ligament Stem Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Dental Pulp Stem Cells

CAT No: RAT/MIC/RAB-iCell-m012

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD515/515/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Stem cells are a group of cells that have the potential for self-renewal and differentiation. They include embryonic stem cells and adult stem cells. So far, adult stem cells, including bone marrow, muscle, nerves, and epithelial tissues have been successfully isolated and cultured. Dental pulp stem cells are an adult stem cell located in the pulp tissue. In 2000, Gornhtos and others first successfully isolated and cultivated human dental pulp stem cells, which opened up a new field for the research of stem cells. Dental pulp stem cells have similar biological characteristics as other adult stem cells, have strong ability of colony formation, and can differentiate into terminal functional cells in dental pulp tissues and has a certain lateral differentiation ability. At present, only human dental pulp stem cell culture has been successfully reported at home and abroad. The research on rat dental pulp stem cells has not been reported at home and abroad, and the mouse is the most commonly used model for experimental research. It has the advantages of easy material extraction and high homology with humans.

Product characteristics:

- 1) Isolated from the normal tooth tissue of experimental animal.
- 2) Cell identification: STRO-1 immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Mesenchymal Stem Cell Culture System (Cat No: PriMed-iCELL-012) for the culturing of Primary Dental Pulp Stem Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Oral Mucosal Epithelial Cells

CAT No: RAT/MIC/RAB-iCELL-m013

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD515/517/566

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Oral epithelial cells are epithelial cells. Human oral epithelial cells are flat, polygonal and not very regular in shape. The wall of the mouth is covered with mucous membrane. Oral epithelial cells are mainly distributed on the buccal part of both sides of the oral cavity.

In the vertical section of the epithelium, the cells have different shapes. A layer of basal cells next to the basement membrane are stem cells with the ability to proliferate and differentiate, are dwarf columnar, some daughter cells move to the shallow layer. Above the basal layer are several layers of polygonal cells, followed by several layers of fusiform or flat cells. Only a few layers of cells near the surface are flat, and the basal cells can continuously divide and proliferate to supply the surface of the cells that are senescent or damaged. The connective tissue in deep layer of stratified squamous epithelium has abundant capillaries, which is conducive to the nutrition of stratified squamous epithelium.

Product characteristics:

- 1) Isolated from the normal oral mucosal tissue of experimental animal.
- 2) Cell identification: PCK immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Epithelioid, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Oral Mucosal Epithelial Cells in vitro.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Tongue Epidermal Cells

CAT No: RAT/MIC/RAB-iCELL-m014

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD429/429/480

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

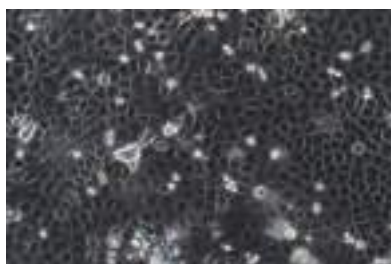
The epidermal cells of the tongue are often gently shed and mixed with saliva and food debris to form a thin layer of white moss. The main role of epidermal cells is to protect, while also having other functions, such as secreting the stratum corneum, etc., with strong keratinization characteristics.

Product characteristics:

- 1) Isolated from the normal tongue tissue of experimental animal.
- 2) Cell identification: PCK immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Keratinocyte Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Tongue Epidermal Cells *in vitro*.



RAT



RAT

Experimental Animal (Rat, Mouse, Rabbit) Primary Tympanic Epithelial Stem Cells

CAT No: RAT/MIC/RAB-iCELL-m015

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD586/583/634

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The tympanic membrane, also called the eardrum, is an elastic gray-white translucent membrane that separates the external auditory canal from the middle ear. The tympanic membrane perforation does not heal and may be associated with stem cell damage or inhibition of proliferation. The distribution of tympanic epithelial stem cells is consistent with the blood-rich area of the tympanic membrane.

Tympanic epithelial stem cells express high levels of $\beta 1$ integrin and have a strong adhesion. The adhesion of type IV collagen to other cells is faster and stronger.

Product characteristics:

- 1) Isolated from the normal tympanic membrane tissue of experimental animal.
- 2) Cell identification: PCK immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommend to use iCell Primary Keratinocyte Culture System (Cat No: PriMed-iCELL-010) for the culturing of Primary Tympanic Epithelial Stem Cells in vitro.

Experimental Animal (Rat, Mouse, Rabbit) Primary Corneal Endothelial Cells

CAT No: RAT/MIC/RAB-iCELL-m016

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD515/514/561

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The cornea is a transparent membrane located on the anterior wall of the eyeball, accounting for about 1/6th of the fibrous membrane. It is round when viewed from the back and is horizontal oval when viewed from the front. Corneal thickness is different in each part, the center is thinnest. The cornea is divided into five layers, from the anterior to the posterior, there are: epithelial cell layer, anterior elastic layer, stromal layer, posterior elastic layer, and endothelial cell layer.

In vitro culture of corneal epithelial cells is an extremely important tool for studying the physiology, pathology, immunology and molecular biology of cornea. It is often applied to study the effects of cell metabolites, viral infections, various growth factors and drugs on cell growth.

Product characteristics:

- 1) Isolated from the normal eye tissue of experimental animal.
- 2) Cell identification: vWF immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Paving stone, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Endothelial Cell Culture System (Cat No: PriMed-iCELL-002) for the culturing of Primary Corneal Endothelial Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Scleral Epithelial Cells

CAT No: RAT/MIC/RAB-iCELL-m017

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD503/503/560

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

The sclera is the outermost layer of the eye wall, composed of dense collagen and elastic fibers, and its structure is tough and opaque. The leading edge of the sclera is connected to the limbus and the posterior to the optic nerve of the optic nerve continues.

The sclera is divided into the upper part of the sclera; the main layer; the subscleral layer. The upper layer is composed of epithelial cells.

Product characteristics:

- 1) Isolated from the normal eye tissue of experimental animal.
- 2) Cell identification: PCK immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Epithelioid, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Epithelial Cell Culture System (Cat No: PriMed-iCELL-001) for the culturing of Primary Scleral Epithelial Cells in vitro.

Experimental Animal (Rat, Mouse, Rabbit) Primary Retinal Muller Cells

CAT No: RAT/MIC/RAB-iCELL-m018

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD539/537/600

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Muller cells are an important type of mammalian retinal glial cells, structurally penetrating the entire retina, play a role in supporting the skeleton, is the center of the retina metabolism, play a decisive role in the normal development of the retina and the maintenance of function. Muller cells also participate in pathological processes such as glaucoma and diabetic retinopathy.

Product characteristics:

- 1) Isolated from the normal eye tissue of experimental animal.
- 2) Cell identification: GS immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, irregular cells, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Glial Cell Culture System (Cat No: PriMed-iCELL-007) for the culturing of Primary Retinal Muller Cells in vitro.



MIC



RAB

Experimental Animal (Rat, Mouse, Rabbit) Primary Placental Mesenchymal Stem Cells

CAT No: HUM-iCELL-e001

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD520/517/577

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

Placental mesenchymal stem cells are pluripotent stem cells and are pluripotent cells with self-replication ability. Under certain conditions, it can differentiate into multiple functional cells. Isolated from mesoderm in embryonic development. MSC is an important cell bank for tissue regeneration in the normal tissue damage repair. Under the special signal caused by tissue damage, MSC migrates to the damaged site, accumulates and proliferates locally, and differentiates along different pathways based on different damage signals. MSCs are easily isolated and expanded, and their in vitro doubling capacity is strong. Even if they are expanded 100 million times, they can maintain their multi-directional differentiation ability. Therefore, MSC is a practical tissue repair cells.

Compared with other stem cells, the origin of placental mesenchymal stem cells is convenient, have a sufficient number of cells, are easy to isolate, culture, amplify and purify, and still have stem cell characteristics after passage for more than 30 generations. Placenta is the best source of mesenchymal stem cells.

Product characteristics:

- 1) Isolated from the normal placental tissue of experimental animal.
- 2) Cell identification: CD44 immunofluorescence staining presented positive, CD45 immunofluorescence staining presented negative.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Mesenchymal Stem Cell Culture System (Cat No: PriMed-iCELL-012) for the culturing of Primary Placental Mesenchymal Stem Cells in vitro.



MIC



MIC

Experimental Animal (Rat, Mouse, Rabbit) Primary Embryonic Fibroblasts Cells

CAT No: HUM-iCELL-e002

Size/Quantity: Each vial contains $>5 \times 10^5$ cells in 1ml volume

Price: USD600/600/657

Packaging: 1ml of cryopreserved cell suspension or T-25 flask

Product description:

In recent years, research on stem cells is one of the hot spots in the field of biotechnology. Embryonic fibroblasts are relatively easy to obtain and have strong proliferative capacity. Therefore, embryonic fibroblasts are often used as feeder cells for mammalian stem cell culture, mainly secreting cytokines such as fibroblast growth factor and leukemia inhibitory factor, to promote stem cell proliferation and inhibit differentiation.

Product characteristics:

- 1) Isolated from the normal placental tissue of experimental animal.
- 2) Cell identification: Vimentin immunofluorescence staining presented positive.
- 3) The cell purity is higher than 90% by identification.
- 4) Excluding HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi.
- 5) Cell growth pattern: Long spindle, adherent culture.

Recommended Medium:

We recommended to use iCell Primary Fibroblast Culture System (Cat No: PriMed-iCELL-003) for the culturing of Primary Embryonic Fibroblasts Cells in vitro.



MIC

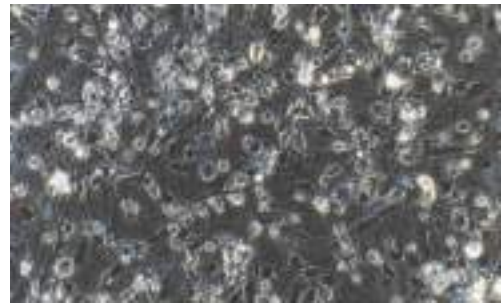


MIC

Cell picture



Rat II alveolar epithelial cells



Rat DRG dorsal root ganglion cells



Rat bone marrow mesenchymal stem cells



Rat dermal fibroblasts cells



Rat cavernous smooth muscle cells



Rat spinal astrocytes cells



Rat hepatic stellate cells

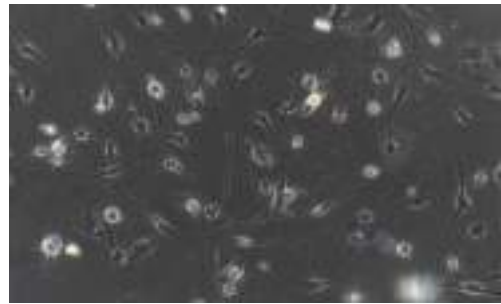


Rat intestinal neuron cells

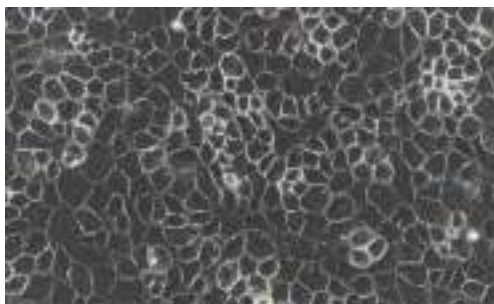
Cell picture



Mice liver kuffer cells



Mice hippocampal neuron cells



Mice chondrocytes cells



Mice renal tubular epithelial cells



Mice gingival fibroblasts cells



Mice bronchial smooth muscle cells



Mice aortic endothelial cells



Mice ovarian granulosa cells

Cell picture



Rabbit osteoblast cells



Rabbit corneal epithelial cells



Rabbit conjunctival epithelial cells



Rabbit endothelial progenitor cells



Rabbit umbilical vein endothelial cells



Rabbit retinal pigment epithelial cells



Rabbit uterine smooth muscle cells

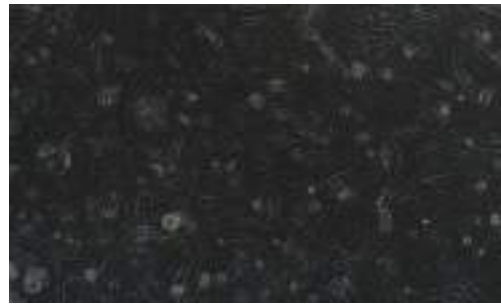


Rabbit corneal stromal cells

Cell picture



Cow skeletal muscle cells



Cow mammary epithelial cells



Cow fat stem cells



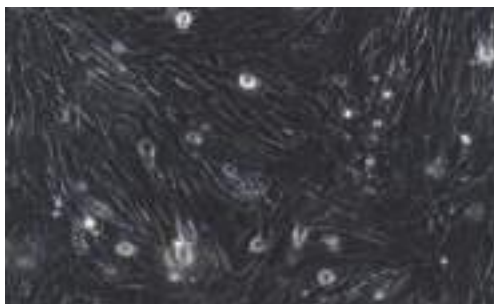
Dog subcutaneous microvascular endothelial cells



Dog chondrocytes cells



Sheep testicular stromal cells



Sheep skeletal muscle cells



Sheep mammary epithelial cells

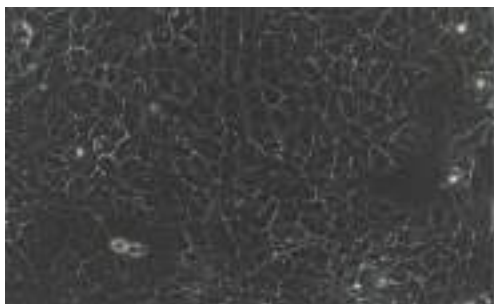
Cell picture



Meishan pig fat cells



Pig lung fibroblast cells



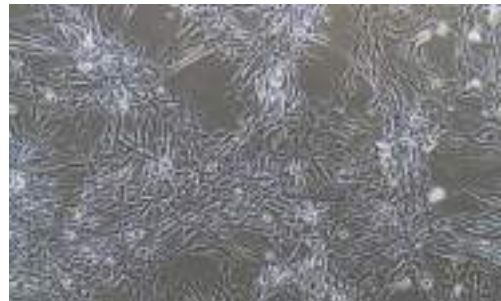
Pig thymic stromal cells



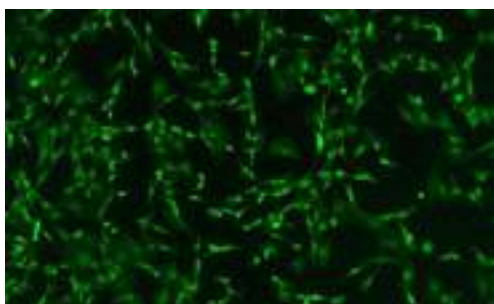
Pig preperitoneal adipocytes



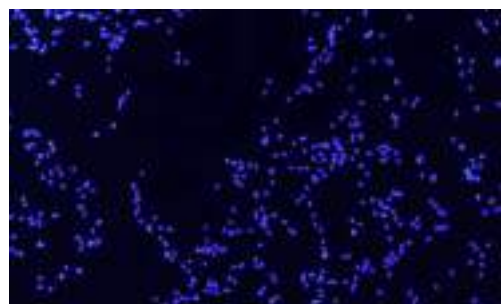
Chicken tracheal epithelial cells



Duck brain microvascular endothelial cells

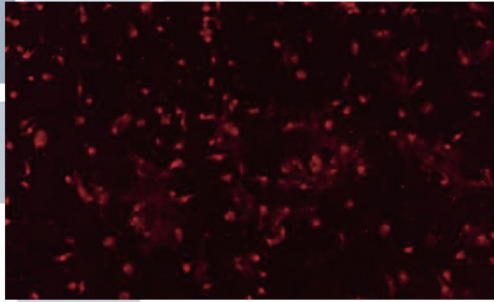


Rat testicular mesenchymal cells

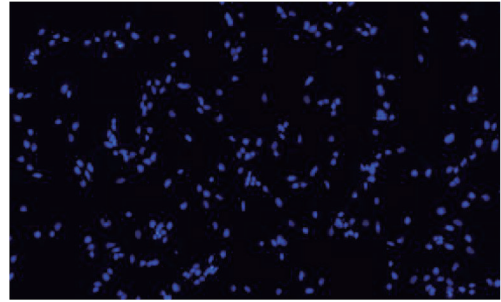


Rat brain microvascular endothelial cells

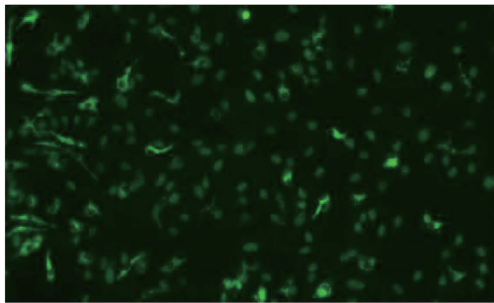
Cell picture



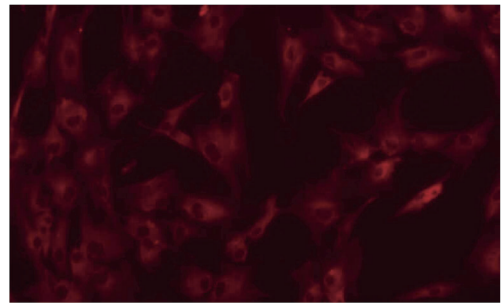
Rat heart stem cells



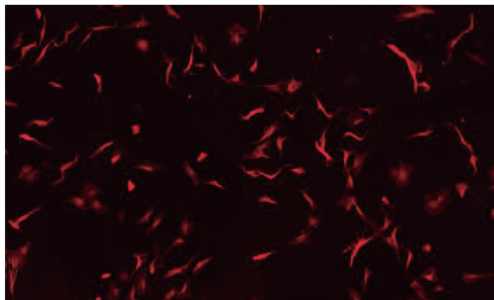
Mice gastric mucosal fibroblasts cells



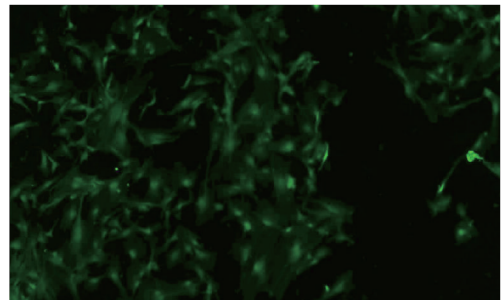
Mice microglia cells



Pig skeletal muscle cells



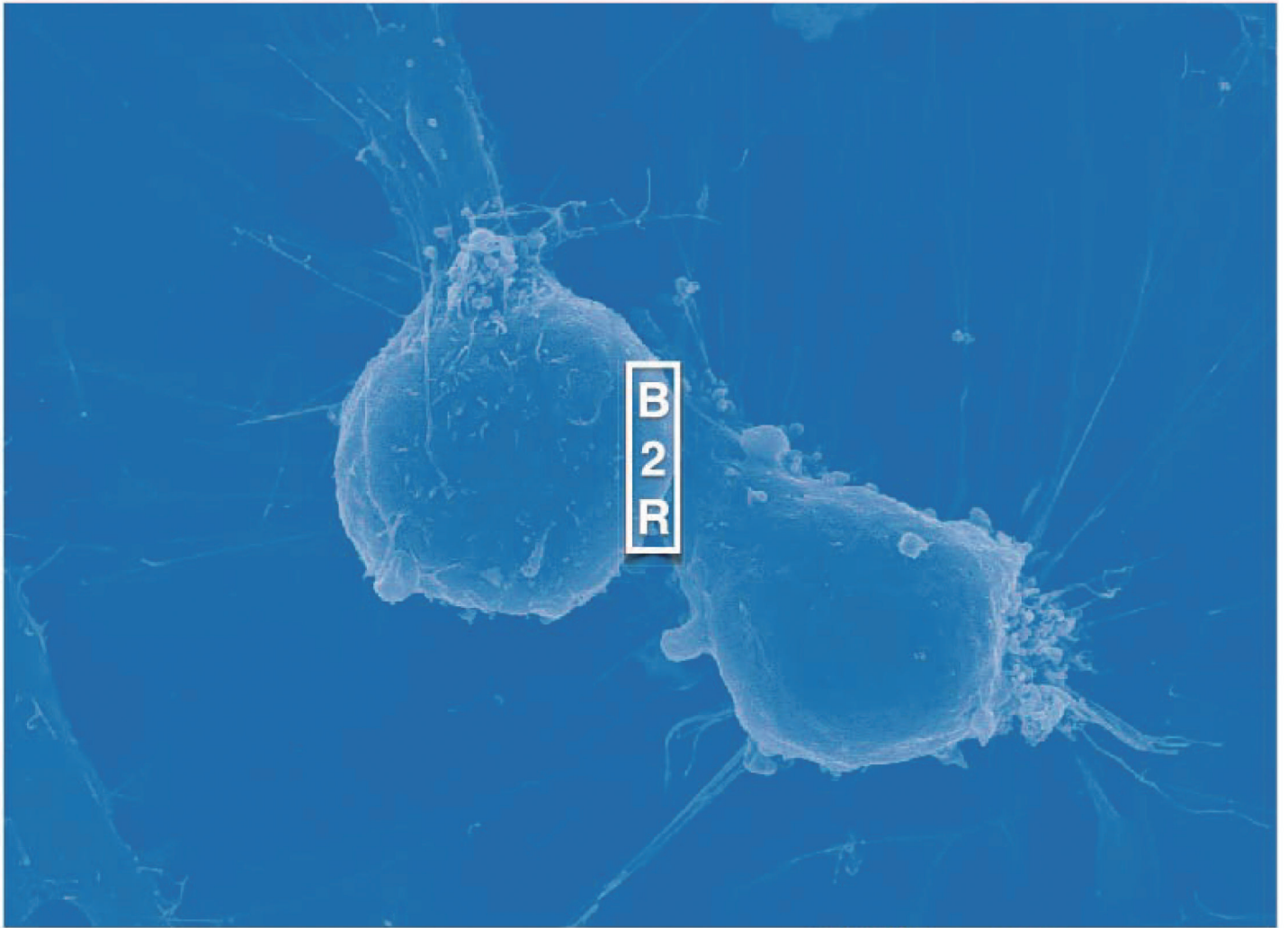
Rat periodontal membrane stem cells



Mice glomerular endothelial cells



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