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Product datasheet

BrdU Cell Proliferation Assay Kit

nordicmubio.com/products/brdu-cell-proliferation-assay-kit/X1327K1

Catalog number: **X1327K1**

Isotype	N/A
Product Type	Assay Kit
Units	200 Tests
Host	N/A
Species Reactivity	General
Application	ELISA

Background

The BrdU Cell Proliferation Assay Kit is a non-isotopic enzyme immunoassay for the quantification of DNA synthesis and cell proliferation. Evaluation of cell cycle progression is essential for investigations in many scientific fields. Measurement of [3H] thymidine incorporation as cells enter S phase has long been the traditional method for the detection of cell proliferation. Subsequent quantification of [3H] thymidine is performed by scintillation counting or autoradiography. This technology is slow, labor intensive and has several limitations including the handling and disposal of radioisotopes and the necessity of expensive equipment. A well-established alternative to [3H] thymidine uptake has been demonstrated by numerous investigators. In these methods bromodeoxyuridine (BrdU), a thymidine analog, replaces [3H] thymidine. BrdU is incorporated into newly synthesized DNA strands of actively proliferating cells. Following partial denaturation of double stranded DNA, BrdU is detected immunochemically allowing the assessment of the population of cells which are actively synthesizing DNA. Exalpha Biologicals BrdU Cell Proliferation Assay Kit involves incorporation of BrdU Reagent into cells cultured in microtiter plates using the cell layer as the solid phase. The resultant assay is, rapid, easy to perform and applicable to high sample throughput. In addition to evaluation of cell proliferation, information such as cell number, morphology and analysis of cellular antigens can be obtained from a single culture.

Product

The BrdU Cell Proliferation Assay Kit contains all ingredients (antibodies, buffers and detection reagents) needed for the quantification of the proliferative activity of cells using an ELISA set up.

Storage
Upon receipt, store kit at -20°C in a non-frost-free freezer. For long term storage, it is recommended that you aliquot and freeze the Prediluted Anti-BrdU Detector Antibody (Component 3) and 2000x Peroxidase Goat anti-Mouse IgG (Component 5) at -20 °C. Thirty (30) minutes prior to the use of each component, thaw component. Remove the Fixative/Denaturing Solution (Component 2) and place at room temperature for at least 4 hours prior to use. The Fixative/Denaturing Solution may contain slight precipitation and its color may vary between clear to light yellow. Return the Prediluted Anti-BrdU Detector Antibody (Component 3) and 2000x Peroxidase Goat anti-Mouse IgG (Component 5) to -20°C immediately after use. All other components may be stored at 4-8°C immediately after use. Special care should be taken to keep the Prediluted Anti-BrdU Detector Antibody (Component 3) and 2000x Peroxidase Goat anti-Mouse IgG (Component 5) cold by pulling out the number of aliquots needed for the test, keeping them on ice, and leaving the remaining aliquots at -20°C.

Shipping Conditions: Exalpha's BrdU Cell Proliferation Assay Kit components are shipped on cold pack.

Caution
This product is intended FOR RESEARCH USE ONLY, and FOR TESTS IN VITRO, not for use in diagnostic or therapeutic procedures involving humans or animals. It may contain hazardous ingredients. Please refer to the Safety Data Sheets (SDS) for additional information and proper handling procedures. Dispose product remainders according to local regulations.This datasheet is as accurate as reasonably achievable, but Exalpha Biologicals accepts no liability for any inaccuracies or omissions in this information.

References
1. Hawker JR Jr., 'Chemiluminescence-based BrdU ELISA to measure DNA synthesis.' J Immunol Methods. 2003 Mar 1;274(1-2):77-82. 2. Ang, L.P.K., et al. 'Development of a conjunctival epithelial equivalent with improved proliferative properties using a multistep serum-free culture system.' Investigative Ophthalmology & Visual Science, 2004, 45, 1789-1795 2. Dual inhibition of IGF-IR and ALK as an effective strategy to eradicate NPM-ALK+ T-cell lymphoma Bhawana George, Suraj Konnath George, Wenyu Shi, Abedul Haque, Ping Shi, Ghazaleh Eskandari, Magnus Axelson, Olle Larsson, Ahmed O. Kaseb & Hesham M. Amin. Journal of Hematology & Oncologyvolume 12, Article number: 80 (2019). ISSN: 1756-8722

Safety Datasheet(s) for this product:
NM_X1327K SDS_V3

Kit Manual
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