



Mouse anti Vimentin

nordicmubio.com/products/mouse-anti-vimentin/MUB1900P

Catalog number: **MUB1900P**

Clone	RV202
Isotype	IgG1
Product Type	Monoclonal Antibody Primary Antibodies
Units	0.1 mg
Host	Mouse
Species Reactivity	Canine Caprine Chicken Hamster Human Monkey Mouse Rat Swine Xenopus Zebrafish
Application	Flow Cytometry Immunocytochemistry Immunohistochemistry (frozen) Immunohistochemistry (paraffin) Western Blotting

Background

Vimentin (57 kDa) is the intermediate filament protein (IFP) of mesenchymal cells. This IFP however often deviates from the tissue-specific and developmentally regulated pattern of expression. Besides its typical expression in most cultured cells, vimentin is also expressed together with several other IFPs during early stages of development. As differentiation proceeds, vimentin is exchanged for the tissue-specific intermediate filament type. Also in cancers, vimentin is often expressed in addition to the tissue-specific IFP.

Source

RV202 is a mouse monoclonal IgG1 antibody derived by fusion of SP2/0-Ag14 mouse myeloma cells with spleen cells from a BALB/c mouse immunized with a cytoskeletal vimentin extract of calf lens.

Product

Each vial contains 100 ul 1 mg/ml purified monoclonal antibody in PBS containing 0.09% sodium azide.

Specificity

RV202 reacts exclusively with vimentin, which is expressed in mesenchymal cells and mesenchymal derived tumors e.g. lymphoma, sarcoma and melanoma.

Applications

RV202 is suitable for immunoblotting, immunocytochemistry, immunohistochemistry on frozen and paraffin embedded tissues and flow cytometry. Optimal antibody dilutions should be determined by titration; recommended range is 1:100 – 1:200 for flow cytometry, and for immunohistochemistry with avidin-biotinylated Horseradish peroxidase complex (ABC) as detection reagent, and 1:100 – 1:1000 for immunoblotting applications.

Storage

The antibody is shipped at ambient temperature and may be stored at +4°C. For prolonged storage prepare appropriate aliquots and store at or below -20°C. Prior to use, an aliquot is thawed slowly in the dark at ambient temperature, spun down again and used to prepare working dilutions by adding sterile phosphate buffered saline (PBS, pH 7.2). Repeated thawing and freezing should be avoided. Working dilutions should be stored at +4°C, not refrozen, and preferably used the same day. If a slight precipitation occurs upon storage, this should be removed by centrifugation. It will not affect the performance or the concentration of the product.

Shipping Conditions: Ship at ambient temperature.

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. Ramaekers, F., Huysmans, A., Schaart, G., Moesker, O., and Vooijs, P. (1987). Tissue distribution of Keratin 7 as monitored by a monoclonal antibody, *Exp Cell Res* 170, 235-49.
2. Viebahn, C., Lane, E. B., and Ramaekers, F. C. (1988). Keratin and vimentin expression in early organogenesis of the rabbit embryo, *Cell Tissue Res* 253, 553-62.
3. Pieper, F. R., Schaart, G., Krimpenfort, P. J., Henderik, J. B., Moshage, H. J., van de

Kemp, A., Ramaekers, F. C., Berns, A., and Bloemendal, H. (1989). Transgenic expression of the muscle-specific intermediate filament protein desmin in nonmuscle cells, *J Cell Biol* 108, 1009-24. 4. Raats, J. M., Pieper, F. R., Vree Egberts, W. T., Verrijp, K. N., Ramaekers, F. C., and Bloemendal, H. (1990). Assembly of amino-terminally deleted desmin in vimentin-free cells, *J Cell Biol* 111, 1971-85. 5. Ramaekers, F., van Niekerk, C., Poels, L., Schaafsma, E., Huijsmans, A., Robben, H., Schaart, G., and Vooijs, P. (1990). Use of monoclonal antibodies to keratin 7 in the differential diagnosis of adenocarcinomas, *Am J Pathol* 136, 641-55.

Safety Datasheet(s) for this product:

NM Sodium Azide



Figure 1. Immunohistochemistry on frozen section of swine colon showing positive staining in connective tissue cells and no reactivity in epithelial cells.



Figure 2. Western blotting result showing the specific reactivity of MUB1900P with the 57kDa protein band of vimentin in both the mouse (3T3 mouse fibroblasts; left lane) and human (normal human dermal fibroblasts; right lane) cell extracts.



Figure 3. Immunohistochemistry on frozen section of swine colon showing positive staining in connective tissue cells and no reactivity in epithelial cells. Nuclear staining with DAPI.



Figure 4. Immunohistochemistry on frozen section of swine colon showing positive staining in connective tissue cells and no reactivity in epithelial cells. Nuclear staining with DAPI.



Figure 5. Immunohistochemistry on frozen section of swine colon showing positive staining in connective tissue cells and no reactivity in epithelial cells. Nuclear staining with DAPI.



Figure 6. Immunohistochemistry on frozen section of zebra fish embryo.



Figure 7. Immunohistochemistry on frozen section of zebra fish embryo



Figure 8. Immunohistochemistry on frozen section of zebra fish embryo



Figure 9. Immunohistochemistry on formalin fixed, paraffin embedded section of human placenta showing positive staining in connective tissue cells and no reactivity in epithelial cells.



Figure 10. Immunohistochemistry on formalin fixed, paraffin embedded section of human small intestine showing positive staining in connective tissue cells and no reactivity in epithelial cells.



Figure 11. Immunohistochemistry on formalin fixed, paraffin embedded section of human small intestine showing positive staining in connective tissue cells and no reactivity in epithelial cells.



Figure 12. Immunohistochemistry on formalin fixed, paraffin embedded section of human spleen showing positive staining in connective tissue cells and lymphoid cells.



Figure 13. Immunohistochemistry on formalin fixed, paraffin embedded section of human tonsillar lymphoma.



Figure 14. Immunohistochemistry on frozen section of swine colon showing positive staining in connective tissue cells and no reactivity in epithelial cells. Nuclear staining with DAPI.