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Schillerstr. 5

BM6008F Monoclonal Antibody to Vimentin - FITC

Alternate names: VIM Quantity: 1 ml

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.

Uniprot ID: P08670

NCBI: NP 003371.2

GenelD: <u>7431</u>

Host / Isotype: Mouse / IgG1

Recommended Isotype

Controls:

SM10F (for use in human samples), SM20F (for use in rat samples)

Clone: RV202

Immunogen: Cytoskeletal Vimentin extract of Bovine lens.

Format: State: Liquid IgG fraction

Buffer System: PBS

Preservatives: 0.09% Sodium Azide

Stabilizers: 0.1% BSA

Label: FITC

Applications: Flow Cytometry.

Immunocytochemistry (cell cultures and cytospins).

Immunofluorescence.

Immunohistochemistry on Frozen Sections.

Recommended Dilutions: 1/10.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

Specificity: RV202 reacts exclusively with Vimentin, which is expressed in mesenchymal cells and

mesenchymal derived tumors e.g. lymphoma, sarcoma and melanoma.

Species Reactivity: Tested: Canine, Chicken, Caprine, Hamster, Human, Monkey, Mouse, Rat, Swine,

Zebrafish, Xenopus.

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.

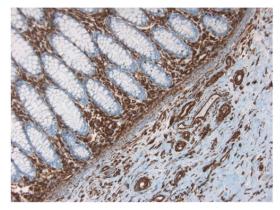


General Readings:

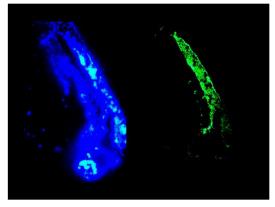
- 1. Ramaekers F, Huysmans A, Schaart G, Moesker O, Vooijs P. Tissue distribution of keratin 7 as monitored by a monoclonal antibody. Exp Cell Res. 1987 May;170(1):235-49. PubMed PMID: 2436934.
- 2. Viebahn C, Lane EB, Ramaekers FC. Keratin and vimentin expression in early organogenesis of the rabbit embryo. Cell Tissue Res. 1988 Sep;253(3):553-62. PubMed PMID: 2460241.
- 3. Pieper FR, Schaart G, Krimpenfort PJ, Henderik JB, Moshage HJ, van de Kemp A, et al. Transgenic expression of the muscle-specific intermediate filament protein desmin in nonmuscle cells. J Cell Biol. 1989 Mar;108(3):1009-24. PubMed PMID: 2646305.
- 4. Raats JM, Pieper FR, Vree Egberts WT, Verrijp KN, Ramaekers FC, Bloemendal H. Assembly of amino-terminally deleted desmin in vimentin-free cells. J Cell Biol. 1990 Nov;111(5 Pt 1):1971-85. PubMed PMID: 1699950.
- 5. Ramaekers F, van Niekerk C, Poels L, Schaafsma E, Huijsmans A, Robben H, et al. Use of monoclonal antibodies to keratin 7 in the differential diagnosis of adenocarcinomas. Am J Pathol. 1990 Mar;136(3):641-55. PubMed PMID: 1690512.

Pictures:

Immunohistochemistry on paraffin section of human colon.

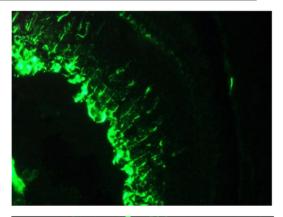


Immunofluorescence staining of the developing neural tube in a 2 days old zebrafish embryo. Left panel: DAPIstaining of cell nuclei, providing an overview of the tissue section used for immunostaining.

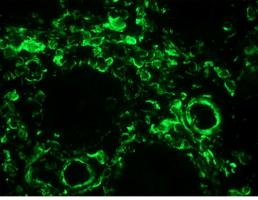




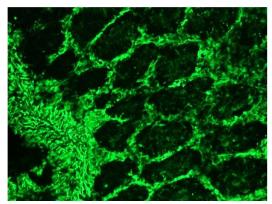
Immunofluorescence staining of a 1 month old zebrafish embryo.



Frozen Section of Swine colon immunostained with RV202-FITC Vimentin Antibody Cat.-No BM6008F (1/200)



Immunohistochemistry using Vimentin Antibody Cat.-No BM6008P on Frozen Section of Swine colon showing positive staining in connective tissue cells and no reactivity in epithelial cells.





Frozen Section of Swine colon immunostained with RV202-HRP Vimentin Antibody Cat.-No BM6008HRP (1/200).

