abcam

Product datasheet

Anti-Vimentin antibody [RV203] ab8979

★★★★★ 3 Abreviews 28 References 画像数 5

製品の概要

製品名 Anti-Vimentin antibody [RV203]

製品の詳細 Mouse monoclonal [RV203] to Vimentin

由来種 Mouse

特異性 This antibody reacts exclusively with vimentin which is expressed in mesenchymal cells and

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

アプリケーション 適用あり: IHC-P, Flow Cyt, IHC-Fr

種交差性 交差種: Human

非交差種: Mouse

免疫原 Recombinant full length protein corresponding to Bovine Vimentin. Cytoskeletal vimentin extract of

calf lens.

Database link: P08670

ポジティブ・コントロール Mesenchymal cells and mesenchymal derived tumors e.g. lymphoma, sarcoma and melanoma

特記事項 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.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

1

パッファー Preservative: 0.09% Sodium azide

Constituent: PBS

精製度 Protein G purified

ポリ/モノ モノクローナル

クローン名 RV203

₹I□-₹ Sp2/0-Ag14

アイソタイプ IgG1

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab8979の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P		Use a concentration of 5 µg/ml.
Flow Cyt		1/100 - 1/200. ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
IHC-Fr		Use at an assay dependent concentration. Recommended range is 1/100 - 1/200 for Immunohistochemistry with avidin-biotinylated horseradish peroxidase complex (ABC) as detection reagent.

ターゲット情報

機能 Vimentins are class-Ill intermediate filaments found in various non-epithelial cells, especially

mesenchymal cells. Vimentin is attached to the nucleus, endoplasmic reticulum, and

mitochondria, either laterally or terminally.

Involved with LARP6 in the stabilization of type I collagen mRNAs for CO1A1 and CO1A2.

組織特異性 Highly expressed in fibroblasts, some expression in T- and B-lymphocytes, and little or no

expression in Burkitt's lymphoma cell lines. Expressed in many hormone-independent mammary

carcinoma cell lines.

関連疾患 Cataract 30

配列類似性 Belongs to the intermediate filament family.

ドメイン The central alpha-helical coiled-coil rod region mediates elementary homodimerization.

The [IL]-x-C-x-x-[DE] motif is a proposed target motif for cysteine S-nitrosylation mediated by the

iNOS-S100A8/A9 transnitrosylase complex.

翻訳後修飾 Filament disassembly during mitosis is promoted by phosphorylation at Ser-55 as well as by

 $nest in \ (By \ similarity). \ One \ of \ the \ most \ prominent \ phosphoproteins \ in \ various \ cells \ of \ mesen chymal$

origin. Phosphorylation is enhanced during cell division, at which time vimentin filaments are significantly reorganized. Phosphorylation by PKN1 inhibits the formation of filaments.

Phosphorylated at Ser-56 by CDK5 during neutrophil secretion in the cytoplasm. Phosphorylated

by STK33.

O-glycosylated during cytokinesis at sites identical or close to phosphorylation sites, this interferes with the phosphorylation status.

S-nitrosylation is induced by interferon-gamma and oxidatively-modified low-densitity lipoprotein (LDL(ox)) possibly implicating the iNOS-S100A8/9 transnitrosylase complex.

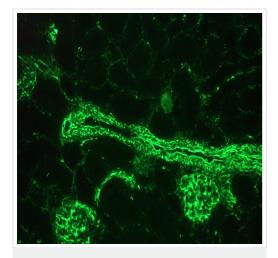
細胞内局在

Cytoplasm.

製品の状態

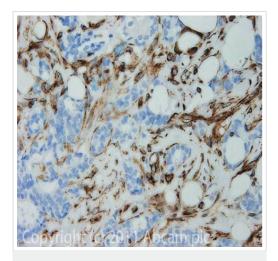
Vimentin is found in connective tissue and in the cytoskeleton.

画像



Immunohistochemistry (Frozen sections) - Anti-Vimentin antibody [RV203] (ab8979)

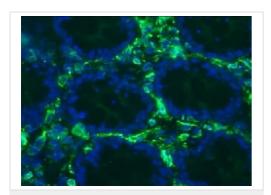
Immunohistochemistry with ab8979 on a frozen section of human kidney showing positive staining in blood vessels, glomeruli and connective tissue cells and no reactivity in epithelial cells.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Vimentin antibody [RV203] (ab8979)

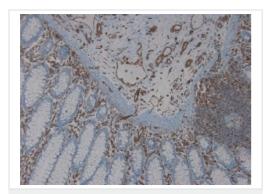
IHC image of ab8979 staining in Breast Cancer formalin fixed paraffin embedded tissue section, performed on a Leica Bond TM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab8979, μ g/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



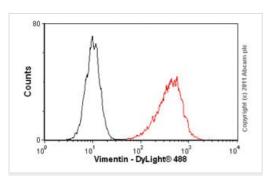
Immunohistochemistry (Frozen sections) - Anti-Vimentin antibody [RV203] (ab8979)

Immunohistochemistry on frozen section of human colon showing positive staining in connective tissue cells and no reactivity in epithelial cells



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Vimentin antibody
[RV203] (ab8979)

Immunohistochemistry on paraffin section of human colon



Flow Cytometry - Anti-Vimentin antibody [RV203] (ab8979)

Overlay histogram showing HeLa cells stained with ab8979 (red line). The cells were fixed with methanol (5 min) and then permeabilized with 0.1% PBS-Triton for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab8979, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HeLa cells fixed with 4% paraformaldehyde (10 min)/permeabilized in 0.1% PBS-Triton used under the same conditions.

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