abcam

Product datasheet

FITC Anti-Vimentin antibody [RV202] ab128507

★★★★★ 5 Abreviews 10 References 2 Images

Overview

Product name	FITC Anti-Vimentin antibody [RV202]
Description	FITC Mouse monoclonal [RV202] to Vimentin
Host species	Mouse
Conjugation	FITC. Ex: 493nm, Em: 528nm
Tested applications	**Suitable for:** IHC-Fr, Flow Cyt (Intra)
Species reactivity	**Reacts with:** Human, Pig **Does not react with:** Zebrafish
Immunogen	Full length native protein (purified) corresponding to Cow Vimentin. Cytoskeletal vimentin extract of calf lens. Database link: **P48616**
Positive control	IHC-Fr: Swine colon tissue. Flow Cyt (intra): HeLa cells.
General notes	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

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Store In the Dark.
Storage buffer	Preservative: 0.09% Sodium azide Constituents: 99% PBS, 0.1% BSA
Purity	Protein G purified
Clonality	Monoclonal
Clone number	RV202
Myeloma	Sp2/0-Ag14

Isotype IgG1

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab128507 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-Fr		1/10 - 1/200.
Flow Cyt (Intra)		1/1000. **ab91356** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

Function Vimentins are class-III 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.

Tissue specificity 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.

Involvement in disease Cataract 30

Sequence similarities Belongs to the intermediate filament family.

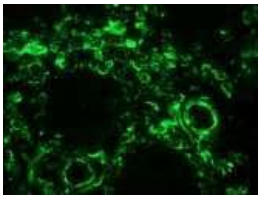
Domain The central alpha-helical coiled-coil rod region mediates elementary homodimerization.
The [IL]-x-C-x-x-[DE] motif is a proposed target motif for cysteine S-nitrosylation mediated by the iNOS-S100A8/A9 transnitrosylase complex.

Post-translational modifications Filament disassembly during mitosis is promoted by phosphorylation at Ser-55 as well as by nestin (By similarity). One of the most prominent phosphoproteins in various cells of mesenchymal 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.

Cellular localization Cytoplasm.

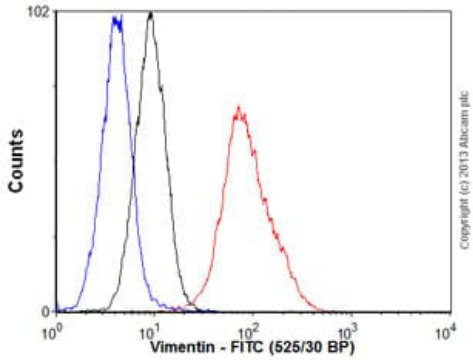
Form Vimentin is found in connective tissue and in the cytoskeleton.

Images



Immunohistochemistry (Frozen sections) - FITC Anti-Vimentin antibody [RV202] (ab128507)

ab128507, at 1/200 dilution, staining Vimentin in a frozen section of Swine colon tissue by Immunohistochemistry.



Flow Cytometry (Intracellular) - FITC Anti-Vimentin antibody [RV202] (ab128507)

Overlay histogram showing HeLa cells stained with **ab128507** (red line). The cells were fixed with 80% 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 (ab128507, 1/1000 dilution) for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [MOPC-21] (FITC) (**ab18435**, 1µg/1x10^6 cells) for 30 min at 22°C. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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