

Product datasheet

Anti-Vimentin antibody [V9] (Biotin) ab79032

1 Image

Overview

Product name	Anti-Vimentin antibody [V9] (Biotin)
Description	Mouse monoclonal [V9] to Vimentin (Biotin)
Host species	Mouse
Conjugation	Biotin
Specificity	We have data to indicate that this antibody may not cross react with Mouse. However, this has not been conclusively tested and expression levels may vary in certain cell lines/tissues.
Tested applications	Suitable for: IHC-P
Species reactivity	Reacts with: Rat, Rabbit, Horse, Chicken, Hamster, Cow, Cat, Dog, Human, Pig, Monkey, Gerbil
Immunogen	Purified Vimentin from pig eye lens
Positive control	Human osteosarcoma and other Sarcoma tissues.
General notes	Abcam is committed to meeting high standards of ethical manufacturing and as such, we will be discontinuing this product, which has been generated by the ascites method, within the next year. We are sorry for any inconvenience this may cause. If you would like help finding an alternative product, please do not hesitate to contact our scientific support team.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.09% Sodium Azide Constituents: 0.2% BSA, 10mM PBS, pH 7.4
Purity	Protein G purified
Clonality	Monoclonal
Clone number	V9
Isotype	IgG1
Light chain type	kappa

Applications

Our [Abpromise guarantee](#) covers the use of **ab79032** 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
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IHC-P

Application notes

IHC-P: 1/100 for 20 min at RT.
Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min.

Not yet tested in other applications.
Optimal dilutions/concentrations should be determined by the end user.

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-density lipoprotein (LDL(ox)) possibly implicating the iNOS-S100A8/9 transnitrosylase complex.

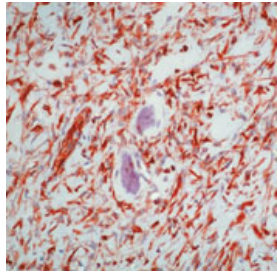
Cellular localization

Cytoplasm.

Form

Vimentin is found in connective tissue and in the cytoskeleton.

Images



ab79032 at 1/100 dilution staining Vimentin in human osteosarcoma by Immunohistochemistry, Formalin-fixed, Paraffin-embedded tissue using peroxidase-conjugate and AEC chromogen. Note cytoplasmic staining of tumor cells. The purified form of this antibody was used for staining.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Vimentin antibody [V9] (Biotin) (ab79032)

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