

Product datasheet

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ARG11100 anti-Vimentin antibody [SQab1859] (FITC)

Package: 500 μl Store at: 4°C

Summary

Product Description FITC-conjugated Mouse Monoclonal antibody [SQab1859] recognizes Vimentin

Tested Reactivity Hu, Ms, Rat, Chk, Dog, Hm, Mk, Pig, Xenopus, Zfsh

Tested Application FACS, ICC/IF, IHC-Fr, WB

Specificity This antibody reacts exclusively with vimentin, which is expressed in mesenchymal cells and

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

Host Mouse

Clone SQab1859

Isotype IgG1

Target Name Vimentin
Species Bovine

Immunogen A cytoskeletal vimentin extract of calf lens.

Conjugation FITC

Alternate Names Vimentin; CTRCT30; HEL113

Application Instructions

Application table	Application	Dilution
	FACS	1:10
	ICC/IF	1:10
	IHC-Fr	1:10
	WB	Assay-dependent
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid	
Purification	Affinity purification with immunogen.	
Buffer	PBS, 0.09% Sodium azide and 0.1% BSA.	
Preservative	0.09% Sodium azide	
Stabilizer	0.1% BSA	
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be	

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol

VIM

Gene Full Name

vimentin

Background

This gene encodes a type III intermediate filament protein. Intermediate filaments, along with microtubules and actin microfilaments, make up the cytoskeleton. The encoded protein is responsible for maintaining cell shape and integrity of the cytoplasm, and stabilizing cytoskeletal interactions. This protein is involved in neuritogenesis and cholesterol transport and functions as an organizer of a number of other critical proteins involved in cell attachment, migration, and signaling. Bacterial and viral pathogens have been shown to attach to this protein on the host cell surface. Mutations in this gene are associated with congenital cataracts in human patients. [provided by RefSeq, Aug 2017]

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. [UniProt]

Highlight

Related products:

<u>Vimentin antibodies</u>; <u>Vimentin Duos / Panels</u>; <u>Anti-Mouse IgG secondary antibodies</u>;

Related news:

New antibody panels for Myofibroblasts and CAFs

Calculated Mw

54 kDa

PTM

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.

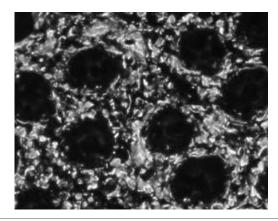
O-glycosylated during cytokinesis at sites identical or close to phosphorylation sites, this interferes with the phosphorylation status.

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

Cellular Localization

Cytoplasm. Cytoplasm, cytoskeleton. Nucleus matrix. [UniProt]

Images



ARG11100 anti-Vimentin antibody [SQab1859] (FITC) IHC-Fr image

Immunofluorescence: Frozen section of Human colon tissue stained with ARG11100 anti-Vimentin antibody [SQab1859] (FITC).

Note reactivity in connective tissue while epithelial cells remain negative.