

Product datasheet

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ARG53965 anti-Vimentin antibody [VI-RE/1] (PE)

Package: 100 μg Store at: 4°C

Summary

Product Description PE-conjugated Mouse Monoclonal antibody [VI-RE/1] recognizes Vimentin

Tested Reactivity Hu

Species Does Not React With Ms, Pig
Tested Application FACS

Specificity The clone VI-RE/1 reacts with human vimentin, a 57 kDa intermediate filament protein expressed on a

wide variety of mesenchymal and mesodermal cell types.

Host Mouse

Clonality Monoclonal

Clone VI-RE/1

Isotype IgG1

Target Name Vimentin
Species Human

Immunogen Bacterially expressed full-length human vimentin

Conjugation PE

Alternate Names Vimentin; CTRCT30; HEL113

Application Instructions

Application table	Application	Dilution
	FACS	1 - 5 μg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid

Purification Note The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The

conjugate is purified by size-exclusion chromatography.

Buffer PBS, 15 mM Sodium azide and 0.2% (w/v) high-grade protease free BSA

Preservative 15 mM Sodium azide

Stabilizer 0.2% (w/v) high-grade protease free BSA

Concentration 0.1 mg/ml

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

gently mixed before use.

Bioinformation

Database links <u>GeneID: 7431 Human</u>

Swiss-port # P08670 Human

Gene Symbol VIM

Gene Full Name vimentin

Background Vimentin is 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

New antibody panels and duos for Tumor immune microenvironment

Anti-SerpinB9 therapy, a new strategy for cancer therapy

Research Area Cancer antibody; Controls and Markers antibody; Developmental Biology antibody; Neuroscience

antibody; Signaling Transduction antibody; Cancer-associated fibroblast antibody; CAF Marker antibody; EMT Study antibody; Mesenchymal Markers antibody; Fibroblast Marker antibody; Muller

Cell Marker antibody; Sarcoma Marker antibody

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

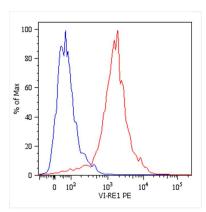
CDK5 during neutrophil secretion in the cytoplasm. Phosphorylated by STK33.

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.



ARG53965 anti-Vimentin antibody [VI-RE/1] (PE) FACS image

Flow Cytometry: LEP-19 human fibroblast cell stained with ARG53965 anti-Vimentin antibody [VI-RE/1] (PE).