

ARG54309 anti-Vimentin antibody [VI-RE/1] (APC)

Package: 50 μg Store at: 4°C

Summary

Product Description	APC-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	lgG1	
Target Name	Vimentin	
Species	Human	
Immunogen	Bacterially expressed full-length human vimentin	
Conjugation	APC	
Alternate Names	Vimentin; CTRCT30; HEL113	

Application Instructions

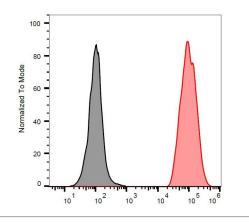
Application table	Application	Dilution
	FACS	1 - 5 μg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid	
Purification Note	The purified antibody is conjugated with cross-linked Allophycocyanin (APC) 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.	

Bio	info	rmat	ion

Diointormation		
Database links	GeneID: 7431 Human	
	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; Vimentin Duos / Panels; Anti-Mouse IgG secondary antibodies;</u> Related news: <u>New antibody panels for Myofibroblasts and CAFs</u> <u>New antibody panels and duos for Tumor immune microenvironment</u> <u>Anti-SerpinB9 therapy, a new strategy for cancer therapy</u>	
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	
ΡΤΜ	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.	



ARG54309 anti-Vimentin antibody [VI-RE/1] (APC) FACS image

Flow Cytometry: Separation of stained ESS-1 cells (red) from unstained ESS-1 cells (black). Cells were stained with ARG54309 anti-Vimentin antibody [VI-RE/1] (APC) at 1 μ g/ml dilution.