

ARG65682 anti-Vimentin antibody

Package: 100 μg, 50 μg Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody recognizes Vimentin
Tested Reactivity	Hu, Ms, Rat
Predict Reactivity	Yeast
Tested Application	WB
Host	Mouse
Clonality	Monoclonal
Target Name	Vimentin
Species	Human
Immunogen	Recombinant Protein of Human Vimentin (NP_003371.2).
Conjugation	Un-conjugated
Alternate Names	Vimentin; CTRCT30; HEL113

Application Instructions

Application table	Application	Dilution
	WB	1:1000 - 1:3000
Application Note	* The dilutions indicate recomme should be determined by the scie	nded starting dilutions and the optimal dilutions or concentrations ntist.

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 50% Glycerol
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol Gene Full Name Background	VIM vimentin 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] Vimentins are class-III intermediate filaments found in various non-enithelial cells, especially
	mesenchymal cells. Vimentin is attached to the nucleus, endoplasmic reticulum, and mitochondria, either laterally or terminally.
Highlight	Involved with LARP6 in the stabilization of type I collagen mRNAs for CO1A1 and CO1A2. [UniProt] Related products: <u>Vimentin antibodies: Vimentin Duos / Panels:</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 PTM	54 kDa 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.

Images



ARG65682 anti-Vimentin antibody WB image

Western blot: Mouse hepatic tissues stained with ARG65682 anti-Vimentin antibody.

From Xie SZ et al. Front Pharmacol- (2021), <u>doi:</u> <u>10.3389/fphar.2021.764282</u>, Fig. 8. A.



ARG65682 anti-Vimentin antibody WB image

Western blot: 30 μg of 1) MDA-MB-231, and 2) MCF7 (negative control) cell lysates stained with ARG65682 anti-Vimentin antibody at 1:500 dilution.