ARG57642
anti-Vimentin antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Vimentin
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Vimentin
Species	Human
Immunogen	Recombinant protein of Human Vimentin.
Conjugation	Un-conjugated
Alternate Names	Vimentin; CTRCT30; HEL113

Application Instructions

Application table

Application	Dilution
ICC/IF	1:50 - 1:200
IHC-P	1:50 - 1:200
WB	1:500 - 1:2000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control: Jurkat

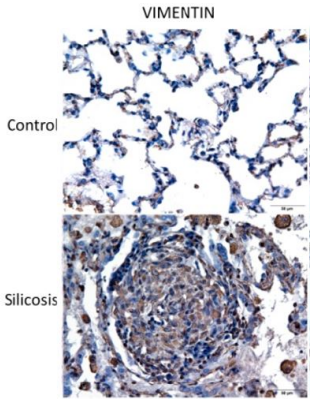
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
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	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: Vimentin antibodies; Vimentin Duos / Panels; Anti-Rabbit IgG secondary antibodies; 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-density lipoprotein (LDL(ox)) possibly implicating the iNOS-S100A8/9 transnitrosylase complex. [UniProt]

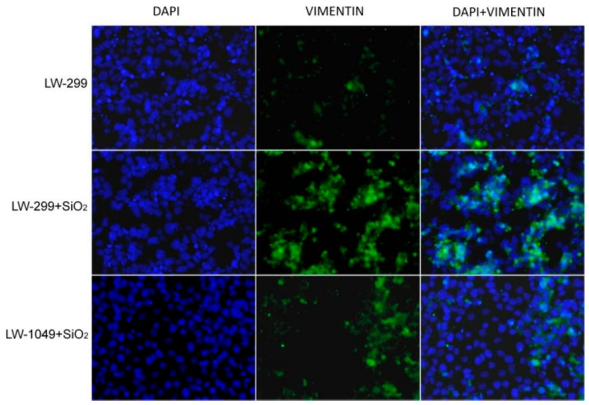
Images



ARG57642 anti-Vimentin antibody IHC-P image

Immunohistochemistry: Rat lung stained with ARG57642 anti-Vimentin antibody.

From Zhu Y et al. Int J Mol Sci- (2020), doi: 10.3390/ijms21041189, Fig. 3. A.



ARG57642 anti-Vimentin antibody ICC-IF image

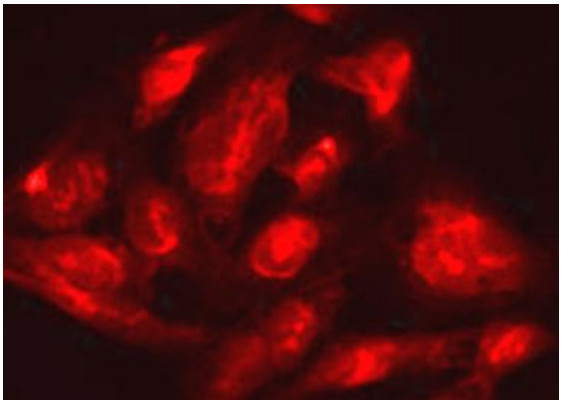
Immunofluorescence: Rat LW299 and LW1049 stained with ARG57642 anti-Vimentin antibody.

From Zhu Y et al. Int J Mol Sci- (2020), doi: 10.3390/ijms21041189, Fig. 6. B.

ARG57642 anti-Vimentin antibody WB image

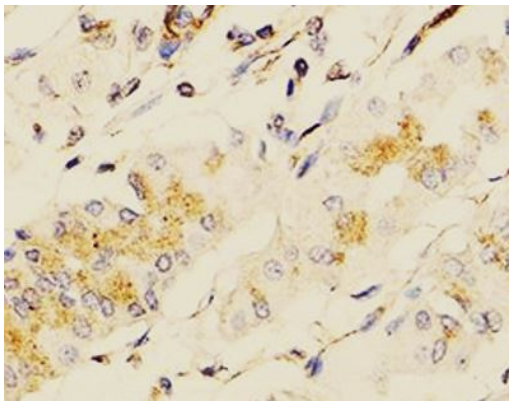
Western blot: Rat lung stained with ARG57642 anti-Vimentin antibody.

From Zhu Y et al. Int J Mol Sci- (2020), doi: 10.3390/ijms21041189, Fig. 3. B.



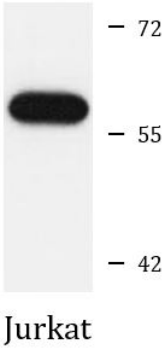
ARG57642 anti-Vimentin antibody ICC/IF image

Immunofluorescence: U2OS cells stained with ARG57642 anti-Vimentin antibody at 1:100 dilution.



ARG57642 anti-Vimentin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human stomach stained with ARG57642 anti-Vimentin antibody at 1:150 dilution.



ARG57642 anti-Vimentin antibody WB image

Western blot: 25 µg of Jurkat cell lysate stained with ARG57642 anti-Vimentin antibody at 1:1000 dilution.