

ARG52468 anti-Vimentin antibody

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

Summary

Product Description	Chicken Polyclonal antibody recognizes Vimentin
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-FoFr , IHC-Fr, WB
Host	Chicken
Clonality	Polyclonal
Isotype	IgY
Target Name	Vimentin
Species	Human
Immunogen	Recombinant human vimentin purified from E. coli
Conjugation	Un-conjugated
Alternate Names	Vimentin; CTRCT30; HEL113

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:500 - 1:5000
	IHC-FoFr	1:500 - 1:5000
	IHC-Fr	1:500 - 1:5000
	WB	1:1000 - 1:10000
Application Note	Specific for the ~50kDa Vimentin protein. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

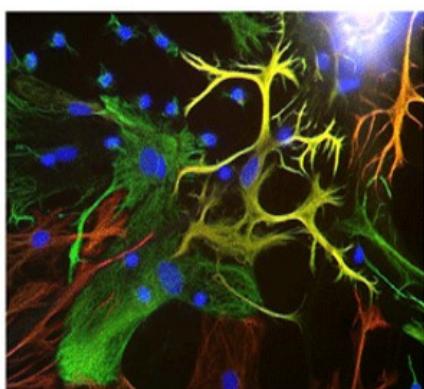
Properties

Form	Liquid
Purification	Total IgY fraction
Buffer	Total IgY fraction in PBS and 10 mM Sodium azide
Preservative	10 mM Sodium azide
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 or below. 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

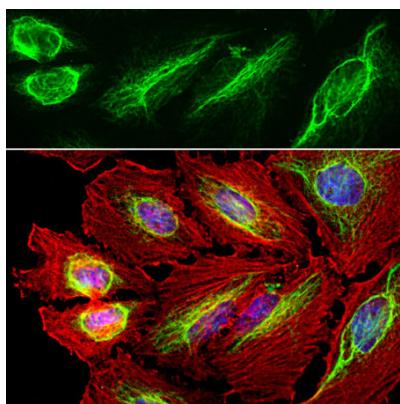
Gene Symbol	VIM
Gene Full Name	vimentin
Background	Vimentin is a type III intermediate filament protein. Intermediate filaments, along with microtubules and actin microfilaments, make up the cytoskeleton. The encoded protein is responsible for maintaining cell shape and integrity of the cytoplasm, and 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.
Highlight	<p>Involved with LARP6 in the stabilization of type I collagen mRNAs for CO1A1 and CO1A2. [UniProt]</p> <p>Related Antibody Duos and Panels: ARG30146 Neural Stem / Progenitor Cell Marker Antibody Duo (Nestin, Vimentin)</p> <p>Related products: Vimentin antibodies; Vimentin Duos / Panels; Anti-Chicken IgY secondary antibodies;</p> <p>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</p>
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-glycosylation 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.

Images



ARG52468 anti-Vimentin antibody ICC/IF image

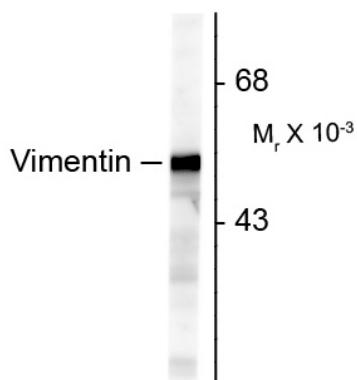
Immunofluorescence: Mixed neuron/glial cultures stained with anti-Vimentin (green) and rabbit anti-GFAP antibody (ARG52312) (red). Vimentin is expressed alone in fibroblastic and endothelial cells, which are the flattened cells in the middle of the image which appear green. Astrocytes may express primarily GFAP, or GFAP and vimentin, and so appear red (GFAP only) or golden yellow (GFAP and Vimentin). In cells which express both GFAP and vimentin, the two proteins assemble to produce heteropolymer filaments.



ARG52468 anti-Vimentin antibody ICC/IF image

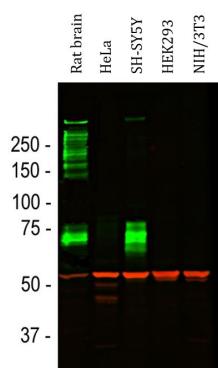
Immunofluorescence: HeLa cells stained with ARG52468 anti-Vimentin antibody (green) at 1:10000 dilution, and costained with anti-Actin antibody (red) at 1:500 dilution. DAPI (blue) for nuclear staining.

The Vimentin antibody stains the intermediate filament network while the Actin antibody labels the submembranous cytoskeleton, stress fibers, and bundles of actin associated with cell adhesion sites.



ARG52468 anti-Vimentin antibody WB image

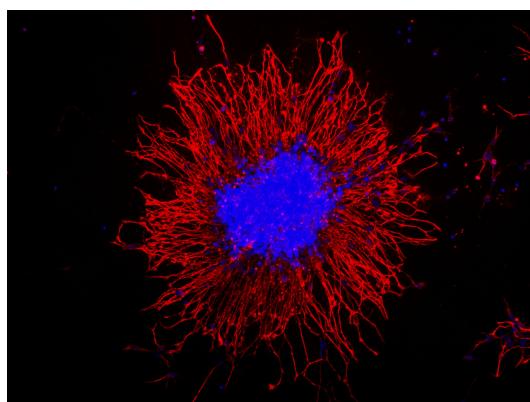
Western Blot: NIH 3T3 cells showing specific immunolabeling of the ~50k Vimentin protein stained with ARG52468 Vimentin antibody.



ARG52468 anti-Vimentin antibody WB image

Western blot: Rat brain, HeLa, SH-SY5Y, HEK293 and NIH/3T3 cell lysates stained with ARG52468 anti-Vimentin antibody (red) at 1:5000 dilution.

The blot was simultaneously stained with [ARG10720](#) anti-MAP2cd antibody [2C4] (green) at 1:5000 dilution, revealing multiple bands around 280 kDa that correspond to full length MAP2a/b isotypes while the ~ 70 kDa bands are MAP2c/d isotypes. MAP2 isotypes are seen only in extracts containing neuronal lineage cells.



ARG52468 anti-Vimentin antibody ICC/IF image

Immunofluorescence: Neuromics hN2 cells (derived from Human embryonic cell line WA09) were fixed and stained with ARG52468 anti-Vimentin antibody (red). Blue staining is nuclear DNA.