ARG55540
anti-Vimentin antibody

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

Summary

Product Description	Mouse Monoclonal antibody recognizes Vimentin
Tested Reactivity	Hu, Mk
Tested Application	ICC/IF, IP, WB
Specificity	This antibody detects endogenous levels of Vimentin and does not cross-react with related proteins.
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a
Target Name	Vimentin
Species	Human
Immunogen	Purified recombinant fragment of Human Vimentin protein (NP_003371.2).
Conjugation	Un-conjugated
Alternate Names	Vimentin; CTRCT30; HEL113

Application Instructions

Application table

Application	Dilution
ICC/IF	1:800
IP	Assay-dependent
WB	1:1000

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

Properties

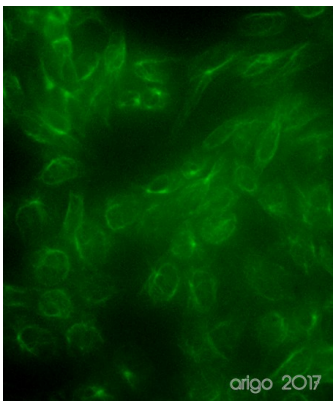
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.4), 0.03% Proclin 300 and 50% Glycerol
Preservative	0.03% Proclin 300
Stabilizer	50% Glycerol
Concentration	1.64 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term 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

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: Vimentin antibodies; Vimentin Duos / Panels; Anti-Mouse IgG secondary antibodies; Related news: New antibody panels for Myofibroblasts and CAFs Understanding Your Cells: Choose the right markers SM5-1, a promising immunotherapy for Hepatocellular Carcinoma (HCC) Freeze! Scientists found a way to stop tumor migration 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.

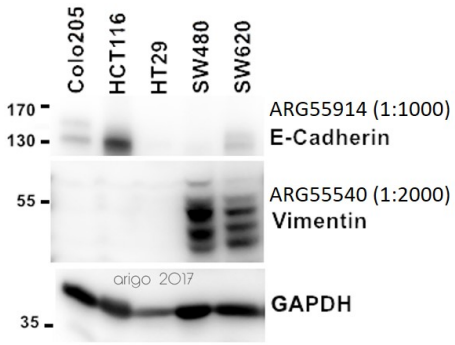
Images



ARG55540 anti-Vimentin antibody ICC/IF image

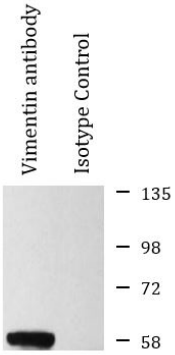
Immunofluorescence: 100% Methanol fixed (RT, 10 min) HeLa cells stained with ARG55540 anti-Vimentin antibody (green) at 1:800 dilution.

Secondary antibody: ARG55393 Goat anti-Mouse IgG (H+L) antibody (FITC)



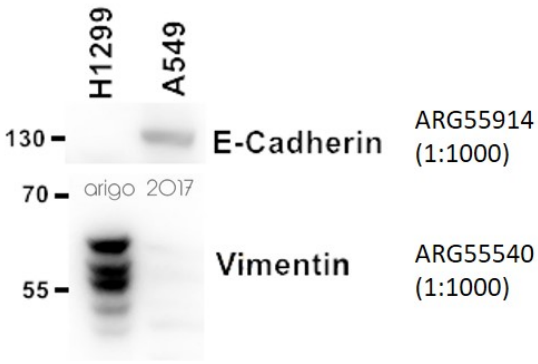
ARG55540 anti-Vimentin antibody WB image

Western blot: 20 µg of Colo205, HCT116, HT29, SW480 and SW620 cell lysates stained with ARG55540 anti-Vimentin antibody at 1:2000 dilution.



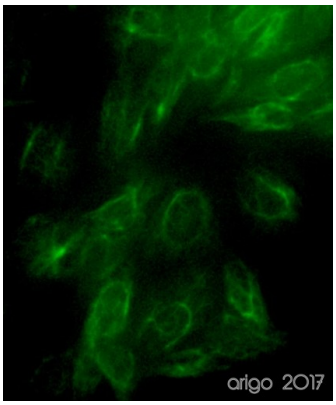
ARG55540 anti-Vimentin antibody IP image

Immunoprecipitation: HeLa cell lysates were immunoprecipitated and stained with ARG55540 anti-Vimentin antibody.



ARG55540 anti-Vimentin antibody WB image

Western blot: 20 µg of H1299 and A549 cell lysates stained with ARG55540 anti-Vimentin antibody at 1:1000 dilution.



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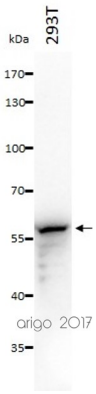

ARG55540 anti-Vimentin antibody WB image

Western blot: 20 µg of 293T cell lysate stained with ARG55540 anti-Vimentin antibody at 1:1000 dilution.