

ARG66302 anti-Vimentin antibody [SQab1859]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [SQab1859] recognizes Vimentin
Tested Reactivity	Hu, Ms, Rat, Chk, Dog, Goat, Hm, Mk, Pig, Xenopus, Zfsh
Tested Application	FACS, ICC/IF, IHC-Fr, IHC-P, WB
Specificity	This antibody recognizes exclusively with vimentin, which is expressed in mesenchymal cells and mesenchymal derived tumors e.g. lymphoma, sarcoma and melanoma.
Host	Mouse
Clonality	Monoclonal
Clone	SQab1859
Isotype	IgG1
Target Name	Vimentin
Species	Bovine
Immunogen	A cytoskeletal Vimentin extract of bovine lens.
Conjugation	Un-conjugated
Alternate Names	Vimentin; CTRCT30; HEL113

Application Instructions

Application table	Application	Dilution
	FACS	1:100 - 1:200
	ICC/IF	1:50 - 1:250
	IHC-Fr	1:50 - 1:250
	IHC-P	1:50 - 1:250
	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.

Observed Size ~57 kDa

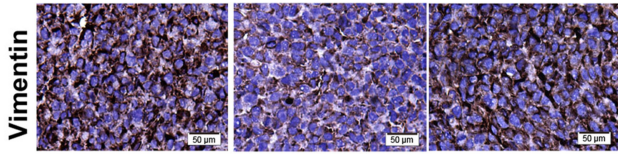
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
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

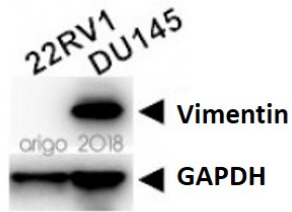
Gene Symbol	VIM
Gene Full Name	vimentin
Background	Vimentin is a type III intermediate filament protein. Intermediate filaments, along with microtubules and actin microfilaments, make up the cytoskeleton. The encoded protein is responsible for maintaining cell shape and integrity of the cytoplasm, and 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	<p>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.</p> <p>Involved with LARP6 in the stabilization of type I collagen mRNAs for CO1A1 and CO1A2. [UniProt]</p>
Highlight	<p>Related Antibody Duos and Panels: ARG30304 Astrocyte Maturation / Muller Cell Marker Antibody Duo (GFAP, Vimentin) ARG30319 Carcinoma / Sarcoma Antibody Duo</p> <p>Related products: Vimentin antibodies; Vimentin Duos / Panels; Anti-Mouse IgG 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	<p>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.</p> <p>O-glycosylated during cytokinesis at sites identical or close to phosphorylation sites, this interferes with the phosphorylation status.</p> <p>S-nitrosylation is induced by interferon-gamma and oxidatively-modified low-density lipoprotein (LDL(ox)) possibly implicating the iNOS-S100A8/9 transnitrosylase complex.</p>



ARG66302 anti-Vimentin antibody [SQab1859] IHC-P image

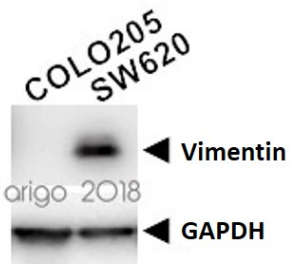
Immunohistochemistry: Mouse xenograft tumor stained with ARG66302 anti-Vimentin antibody [SQab1859].

From Jianxia Wei et al. Cancer Sci. (2023), [doi: 10.1111/cas.15998](https://doi.org/10.1111/cas.15998), Fig. 6E.



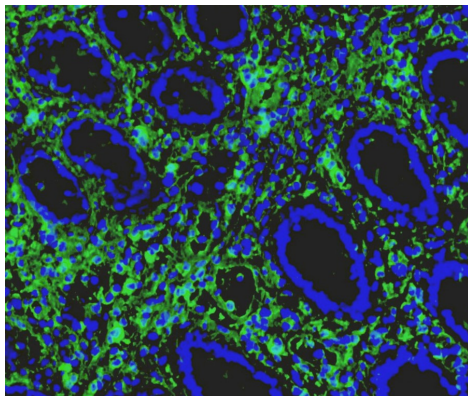
ARG66302 anti-Vimentin antibody [SQab1859] WB image

Western blot: 20 µg of 22RV1 and DU145 cell lysates stained with ARG66302 anti-Vimentin antibody [SQab1859] at 1:2000 dilution and [ARG65680](https://arigo.bio/antibody/ARG65680) anti-GAPDH antibody at 1:10000 dilution.



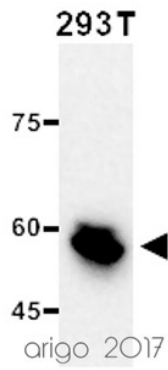
ARG66302 anti-Vimentin antibody [SQab1859] WB image

Western blot: 20 µg of COLO205 and SW620 cell lysates stained with ARG66302 anti-Vimentin antibody [SQab1859] at 1:2000 dilution and [ARG65680](https://arigo.bio/antibody/ARG65680) anti-GAPDH antibody at 1:10000 dilution.



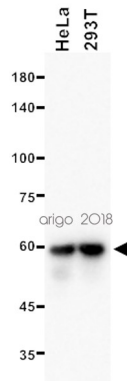
ARG66302 anti-Vimentin antibody [SQab1859] IHC-Fr image

Immunohistochemistry: Frozen section of swine colon stained with ARG66302 anti-Vimentin antibody [SQab1859] (green) at 1:200 dilution. DAPI (blue) staining for cell nuclei.



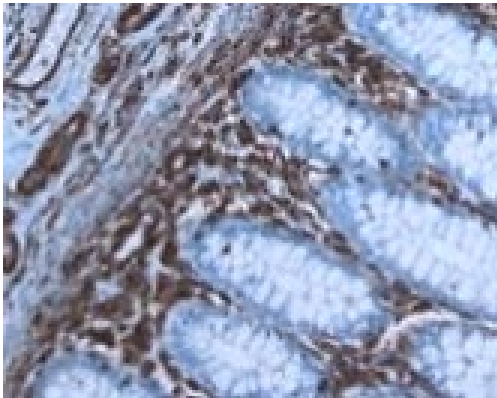
ARG66302 anti-Vimentin antibody [SQab1859] WB image

Western blot: 20 µg of 293T cell lysate stained with ARG66302 anti-Vimentin antibody [SQab1859] at 1:1000 dilution.



ARG66302 anti-Vimentin antibody [SQab1859] WB image

Western blot: 20 µg of HeLa and 293T cell lysates stained with ARG66302 anti-Vimentin antibody [SQab1859] at 1:1000 dilution.



ARG66302 anti-Vimentin antibody [SQab1859] IHC-P image

Immunohistochemistry: paraffin section of Human colon stained with ARG66302 anti-Vimentin antibody [SQab1859].