

ARG52748 anti-CD31 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes CD31
Tested Reactivity	Hu, Ms, Rat, Pig
Tested Application	ICC/IF, IHC-FoFr, IHC-Fr, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	CD31
Species	Human
Immunogen	Synthetic peptide corresponding to C-terminus of mouse CD31 protein.
Conjugation	Un-conjugated
Alternate Names	EndoCAM; CD31/EndoCAM; PECAM-1; CD31; PECA1; CD antigen CD31; GPIIA'; endoCAM; Platelet endothelial cell adhesion molecule

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:25 - 1:100
	IHC-FoFr	1:25 - 1:50
	IHC-Fr	1:50
	IHC-P	1:50
	WB	1:100 - 1:1000
	<p>Application Note</p> <p>IHC-P: Antigen Retrieval: Boil tissue section in 10mM citrate buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min. Incubation Time: 10 min at RT. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p>	
Positive Control	Tonsil	
Observed Size	~ 120 kDa	

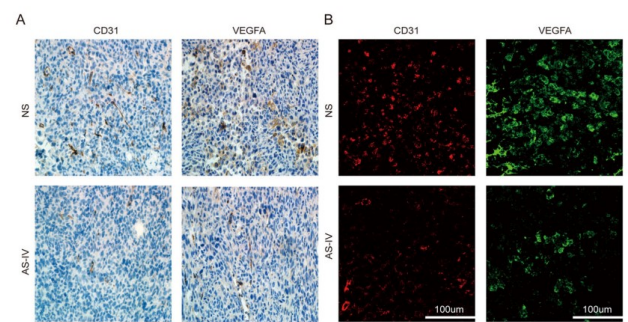
Properties

Form	Liquid
Purification	Immunogen affinity purified
Buffer	PBS (pH 7.6), 1% BSA and < 0.1% Sodium azide

Preservative	< 0.1% Sodium azide
Stabilizer	1% BSA
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

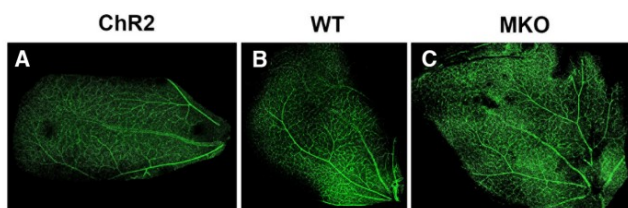
Background	CD31 protein is found on the surface of platelets, monocytes, neutrophils, and some types of T-cells, and makes up a large portion of endothelial cell intercellular junctions. The encoded protein is a member of the immunoglobulin superfamily and is likely involved in leukocyte migration, angiogenesis, and integrin activation. [provided by RefSeq, May 2010]
Function	CD31 is a cell adhesion molecule which is required for leukocyte transendothelial migration (TEM) under most inflammatory conditions (PubMed:19342684, PubMed:17580308). Tyr-690 plays a critical role in TEM and is required for efficient trafficking of PECAM1 to and from the lateral border recycling compartment (LBRC) and is also essential for the LBRC membrane to be targeted around migrating leukocytes (PubMed:19342684). Trans-homophilic interaction may play a role in endothelial cell-cell adhesion via cell junctions (PubMed:27958302). Heterophilic interaction with CD177 plays a role in transendothelial migration of neutrophils (PubMed:17580308). Homophilic ligation of PECAM1 prevents macrophage-mediated phagocytosis of neighboring viable leukocytes by transmitting a detachment signal (PubMed:12110892). Promotes macrophage-mediated phagocytosis of apoptotic leukocytes by tethering them to the phagocytic cells; PECAM1-mediated detachment signal appears to be disabled in apoptotic leukocytes (PubMed:12110892). Modulates bradykinin receptor BDKRB2 activation (PubMed:18672896). Regulates bradykinin- and hyperosmotic shock-induced ERK1/2 activation in endothelial cells (PubMed:18672896). Induces susceptibility to atherosclerosis.
Highlight	<p>Isoform Delta15: Does not protect against apoptosis. [UniProt]</p> <p>Related Antibody Duos and Panels:</p> <p>ARG30300 Endothelial Cell Marker Antibody Duo (CD31, CD34)</p> <p>ARG30327 Microvascular Density Antibody Panel</p> <p>Related products:</p> <p>CD31 antibodies; CD31 ELISA Kits; CD31 Duos / Panels; Anti-Rabbit IgG secondary antibodies;</p> <p>Related news:</p> <p>Microglial help TAM-ing inflammation in the brain</p> <p>SM5-1, a promising immunotherapy for Hepatocellular Carcinoma (HCC)</p> <p>Besides tumor suppression, what's p53 busy for during embryogenesis?</p> <p>Vascular development is regulated by FGF-dependent metabolic control</p>
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Controls and Markers antibody; Developmental Biology antibody; Signaling Transduction antibody; Endothelial Cell Marker antibody; Microvascular Density Study antibody
Calculated Mw	83 kDa
PTM	Phosphorylated on Ser and Tyr residues after cellular activation. Phosphorylated on tyrosine residues by FER and FES in response to FCER1 activation (By similarity). In endothelial cells Fyn mediates mechanical-force (stretch or pull) induced tyrosine phosphorylation. Palmitoylation by ZDHHC21 is necessary for cell surface expression in endothelial cells and enrichment in membrane rafts.
Cellular Localization	Membrane



ARG52748 anti-CD31 antibody IHC-P image

WB analysis of LLC xenograft mouse tumor tissue lysate stained with ARG52748 anti-CD31 antibody.

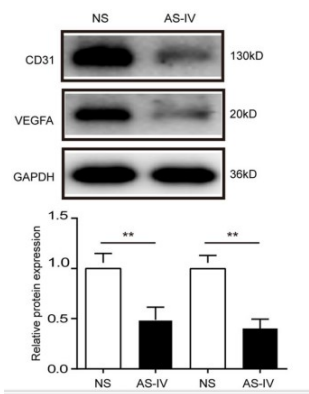
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ARG52748 anti-CD31 antibody IHC image

Cryostat sections from Mouse Retinal stained with ARG52748 anti-CD31 antibody.

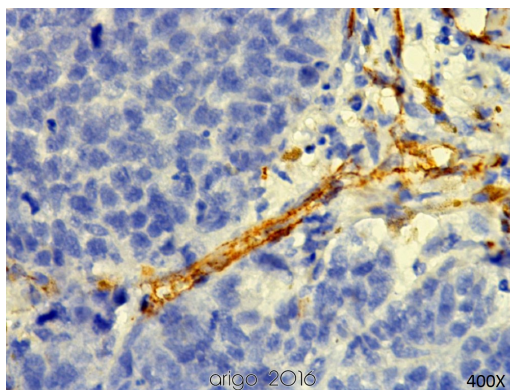
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ARG52748 anti-CD31 antibody WB image

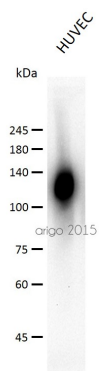
WB analysis of LLC xenograft mouse tumor tissue lysate stained with ARG52748 anti-CD31 antibody.

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ARG52748 anti-CD31 antibody IHC-P image

Immunohistochemistry: Formalin-fixed and Paraffin-embedded MDA-MB-231 (tumor xenograft study) stained with ARG52748 anti-CD31 antibody. Antigen Retrieval Buffer: Bond Epitope Retrieval Solution.



ARG52748 anti-CD31 antibody WB image

Western blot: 30 µg of HUVEC lysate stained with ARG52748 anti-CD31 antibody at 1:500 dilution.