

ARG58087
anti-CD31 antibodyPackage: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes CD31
Tested Reactivity	Hu, Ms
Tested Application	IHC-Fr, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	CD31
Species	Mouse
Immunogen	Synthetic peptide within aa. 600 to the C-terminus of Mouse CD31 (NP_001292086.1).
Conjugation	Un-conjugated
Alternate Names	EndoCAM; CD31/EndoCAM; PECAM-1; CD31; PECA1; CD antigen CD31; GPIIA ¹ ; endoCAM; Platelet endothelial cell adhesion molecule

Application Instructions

Application table	Application	Dilution
	IHC-Fr	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	HUVEC and Mouse spleen	
Observed Size	HUVEC: 150 - 170 kDa Mouse spleen: 135 kDa	

Properties

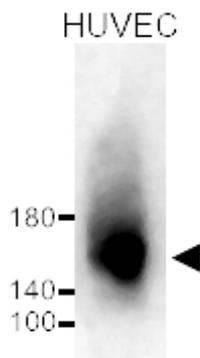
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. 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

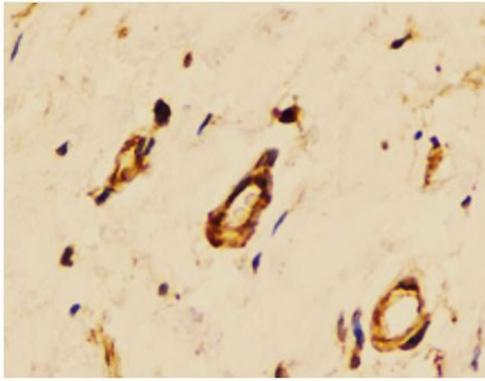
Gene Symbol	PECAM1
Gene Full Name	platelet/endothelial cell adhesion molecule 1
Background	CD31 protein is found on the surface of platelets, monocytes, neutrophils, and some types of T-cells, and makes up a large portion of endothelial cell intercellular junctions. The encoded protein is a member of the immunoglobulin superfamily and is likely involved in leukocyte migration, angiogenesis, and integrin activation. [provided by RefSeq, May 2010]
Function	<p>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.</p> <p>Isoform Delta15: Does not protect against apoptosis. [UniProt]</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	<p>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.</p> <p>Palmitoylation by ZDHHC21 is necessary for cell surface expression in endothelial cells and enrichment in membrane rafts. [UniProt]</p>
Cellular Localization	Cell membrane, Single-pass type I membrane protein, Cell membrane, Lipid-anchor, Cell junction, Cell junction. [UniProt]

Images



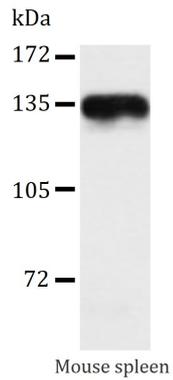
ARG58087 anti-CD31 antibody WB image

Western blot: 20 μ g of HUVEC cell lysate stained with ARG58087 anti-CD31 antibody at 1:1000 dilution.



ARG58087 anti-CD31 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast cancer stained with ARG58087 anti-CD31 antibody at 1:100 dilution.



ARG58087 anti-CD31 antibody WB image

Western blot: 25 µg of Mouse spleen lysate stained with ARG58087 anti-CD31 antibody at 1:1000 dilution.