

# ARG45111 anti-CD31 antibody

Package: 50 μg Store at: -20°C

# Summary

Product Description	Goat Polyclonal antibody recognizes CD31
Tested Reactivity	Ни
Tested Application	ICC/IF, IHC-P
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	CD31
Species	Human
Immunogen	Synthetic peptide around the internal region of Human CD31(aa. 218-231).
Conjugation	Un-conjugated
Alternate Names	PECAM1; Platelet And Endothelial Cell Adhesion Molecule 1; CD31 Antigen; CD31; Platelet Endothelial Cell Adhesion Molecule; PECAM-1; EndoCAM; GPIIA'; PECA1; Platelet/Endothelial Cell Adhesion Molecule 1; Platelet Endothelial Cell Adhesion Molecule-1; CD31/EndoCAM

# **Application Instructions**

Application table	Application	Dilution
	ICC/IF	10 µg/ml
	IHC-P	4-6 μg/ml
Application Note	cooling at RT for 20 min Incubation Time: 10 min	n at RT. recommended starting dilutions and the optimal dilutions or concentrations
Positive Control	Tonsil	

# Properties

Form	Liquid
Purification	Affinity purified
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

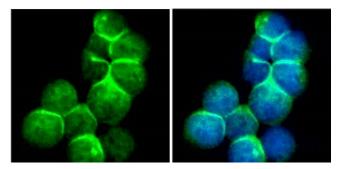
and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note

For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol	PECAM1
Gene Full Name	Platelet And 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	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. Isoform Delta15: Does not protect against apoptosis. [UniProt]
	isororm Deitars: Does not protect against apoptosis. [UniProt]
Highlight	Related Antibody Duos and Panels: <u>ARG30300 Endothelial Cell Marker Antibody Duo (CD31, CD34)</u> <u>ARG30327 Microvascular Density Antibody Panel</u> Related products: <u>CD31 antibodies: CD31 ELISA Kits: CD31 Duos / Panels: Anti-Rabbit IgG secondary antibodies:</u> Related news: <u>Microglial help TAM-ing inflammation in the brain</u> <u>SM5-1, a promising immunotherapy for Hepatocellular Carcinoma (HCC)</u> <u>Besides tumor suppression, what's p53 busy for during embryogenesis?</u> <u>Vascular development is regulated by FGF-dependent metabolic control</u>
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
РТМ	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



#### ARG45111 anti-CD31 antibody ICC/IF image

Immunofluorescence: Jurkat stained with ARG45111 anti-CD31 antibody at 10  $\mu\text{g}/\text{ml}$  dilution.