

ARG66342 anti-CD31 antibody [SQab18116]

Package: 100 µl
Store at: -20°C

Summary

Product Description	Recombinant Rabbit Monoclonal antibody [SQab18116] recognizes CD31
Tested Reactivity	Hu
Tested Application	FACS, IHC-P, IP, WB
Host	Rabbit
Clonality	Monoclonal
Clone	SQab18116
Isotype	IgG
Target Name	CD31
Species	Human
Immunogen	Synthetic peptide corresponding to residues on the C-terminus of Human CD31.
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
	FACS	1:200 - 1:1000
	IHC-P	1:1600 - 1:3200
	IP	1:50
	WB	1:1000 - 1:2000
Application Note	IHC-P: Antigen Retrieval: Heat mediated was performed using Tris/EDTA buffer (pH 9.0). * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 140 kDa	

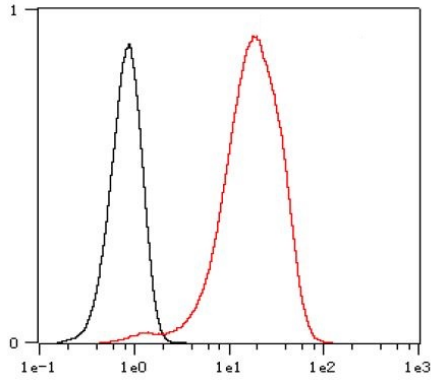
Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS, 0.01% Sodium azide, 40% Glycerol and 0.05% BSA.
Preservative	0.01% Sodium azide
Stabilizer	40% Glycerol and 0.05% 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. 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.

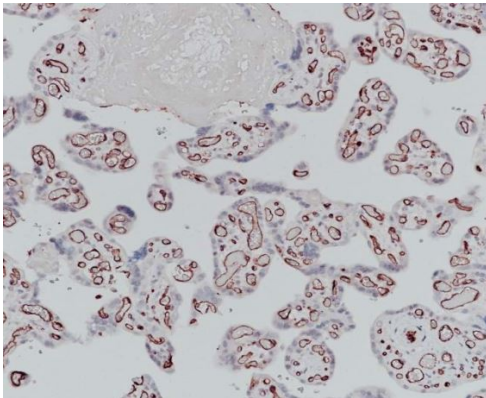
Bioinformation

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>
Highlight	<p>Related products: CD31 antibodies; CD31 ELISA Kits; CD31 Duos / Panels; Anti-Rabbit IgG secondary antibodies;</p> <p>Related news: Cancer Pathology Markers (SQ clones)</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>



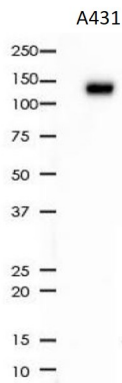
ARG66342 anti-CD31 antibody [SQab18116] FACS image

Flow Cytometry: Jurkat cells fixed with 4% paraformaldehyde for 10 min. The cells were then stained with ARG66342 anti-CD31 antibody [SQab18116] (red) at 1:1000 dilution in 1x PBS/1% BSA for 30 min at room temperature, followed by Alexa Fluor® 488 labelled secondary antibody. Unlabelled sample (black) was used as a control.



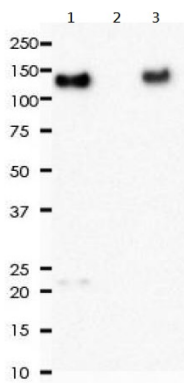
ARG66342 anti-CD31 antibody [SQab18116] IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human placenta stained with ARG66342 anti-CD31 antibody [SQab18116] at 1:3200 dilution. Antigen Retrieval: Heat mediated was performed using Tris/EDTA buffer (pH 9.0).



ARG66342 anti-CD31 antibody [SQab18116] WB image

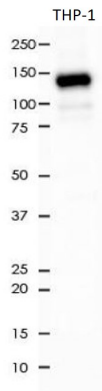
Western blot: 10 µg of A431 cell lysate stained with ARG66342 anti-CD31 antibody [SQab18116] at 1:1000 dilution.



ARG66342 anti-CD31 antibody [SQab18116] IP image

Immunoprecipitation: 0.4 mg of THP-1 whole cell lysate was immunoprecipitated (1:50 dilution) and stained with ARG66342 anti-CD31 antibody [SQab18116].

Lane 1: Immunoprecipitation in THP-1 whole cell lysate
 Lane 2: PBS instead of Primary Ab in THP-1 whole cell lysate
 Lane 3: THP-1 whole cell lysate, 10 µg (input)



ARG66342 anti-CD31 antibody [SQab18116] WB image

Western blot: 10 µg of THP-1 cell lysate stained with ARG66342 anti-CD31 antibody [SQab18116] at 1:1000 dilution.