

**CD31 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7465B**

**Specification**

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**CD31 Antibody (C-term) - Product Information**

Application	<b>WB, FC,E</b>
Primary Accession	<a href="#">P16284</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Antigen Region	<b>690-718</b>

**CD31 Antibody (C-term) - Additional Information**

**Gene ID** 5175

**Other Names**

Platelet endothelial cell adhesion molecule, PECAM-1, EndoCAM, GPIIA', PECA1, CD31, PECAM1

**Target/Specificity**

This CD31 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 690-718 amino acids from the C-terminal region of human CD31.

**Dilution**

WB~~1:1000

FC~~1:25

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

CD31 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**CD31 Antibody (C-term) - Protein Information**

**Name** PECAM1

**Function** Cell adhesion molecule which is required for leukocyte transendothelial migration (TEM) under most inflammatory conditions (PubMed:[17580308](#), PubMed:[19342684](#)). 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 (By similarity).

#### Cellular Location

Cell membrane; Single-pass type I membrane protein. Note=Cell surface expression on neutrophils is down-regulated upon fMLP or CXCL8/IL8- mediated stimulation. [Isoform Delta15]: Cell junction. Note=Localizes to the lateral border recycling compartment (LBRC) and recycles from the LBRC to the junction in resting endothelial cells

#### Tissue Location

Expressed on platelets and leukocytes and is primarily concentrated at the borders between endothelial cells (PubMed:18388311, PubMed:21464369). Expressed in human umbilical vein endothelial cells (HUVECs) (at protein level) (PubMed:17580308, PubMed:19342684). Expressed on neutrophils (at protein level) (PubMed:17580308). Isoform Long predominates in all tissues examined (PubMed:12433657). Isoform Delta12 is detected only in trachea (PubMed:12433657). Isoform Delta14-15 is only detected in lung (PubMed:12433657). Isoform Delta14 is detected in all tissues examined with the strongest expression in heart (PubMed:12433657). Isoform Delta15 is expressed in brain, testis, ovary, cell surface of platelets, human umbilical vein endothelial cells (HUVECs), Jurkat T- cell leukemia, human erythroleukemia (HEL) and U-937 histiocytic lymphoma cell lines (at protein level) (PubMed:12433657, PubMed:18388311).

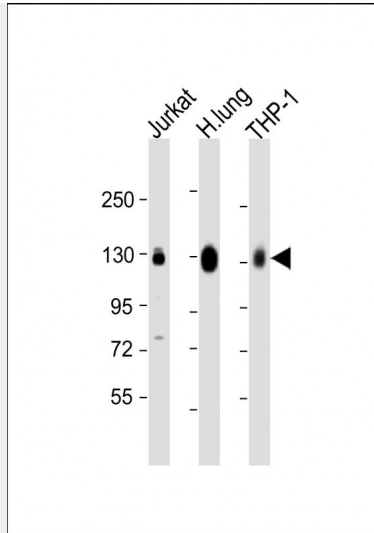
#### CD31 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

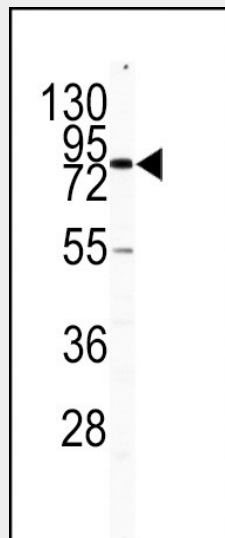
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### CD31 Antibody (C-term) - Images

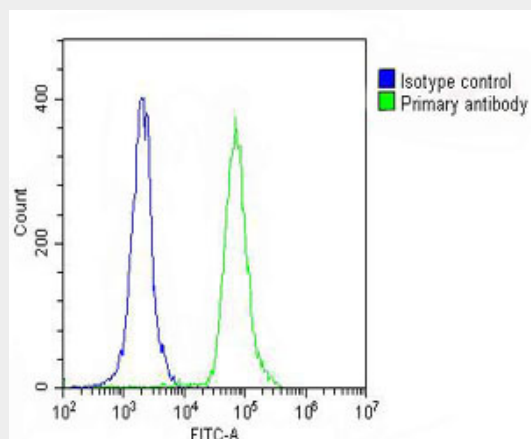




All lanes : Anti-CD31 Antibody (C-term) at 1:2000 dilution Lane 1: Jurkat whole cell lysate Lane 2: human lung lysate Lane 3: THP-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 83 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of CD31 antibody (C-term) (Cat.#AP7465b) in HL60 cell line lysates (35ug/lane). CD31 (arrow) was detected using the purified Pab.



Overlay histogram showing THP-1 cells stained with AP7465b (green line). The cells were fixed with 2% paraformaldehyde (10 min). The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP7465b, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG (1µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >10, 000 events was performed.

### **CD31 Antibody (C-term) - Background**

CD31 is a cell adhesion molecule expressed on platelets and at endothelial cell intercellular junctions.

### **CD31 Antibody (C-term) - References**

Simmons D.L., Walker C.J. Exp. Med. 171:2147-2152(1990)  
Stockinger H., Gadd S.J.J. Immunol. 145:3889-3897(1990)  
Newman P.J., Berndt M.C.Science 247:1219-1222(1990)

### **CD31 Antibody (C-term) - Citations**

- [Pituitary tumor transforming gene: a novel therapeutic target for glioma treatment.](#)