

Product Datasheet

CD31 Antibody / PECAM-1 (orb2637881)

Description	PECAM-1, or platelet endothelial cell adhesion molecule-1, also called CD31, is made up of six extracellular immunoglobulin-like domains, a single transmembrane domain, and a cytoplasmic domain containing serine and tyrosine residues that when phosphorylated, activate the molecules signaling function. It is expressed on platelets, monocytes, neutrophils, bone marrow macrophage and dendritic cells precursors, and at the intracellular junction of endothelial cells. PECAM-1, on the endothelial lining of blood vessels, helps maintain the vascular barrier. In response to inflammatory mediators, the endothelial pull away from each other allowing fluid, inflammatory cells and proteins into the extravascular space. The inflammatory response fades as adhesion of neighboring cells increase. PECAM-1 also plays an important role in angiogenesis, promoting endothelial cell motility, junctional development and capillary morphogenesis.
Species/Host	Mouse
Reactivity	Human
Conjugation	Unconjugated
Tested Applications	FACS, IHC-P, WB
Immunogen	Human recombinant PECAM-1 / CD31 protein was used as the immunogen for this antibody.
Preservatives	0.2 mg/ml in 1X PBS with 0.1 mg/ml rAlbumin (US sourced) and 0.05% sodium azide
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.
Note	For research use only

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Application notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the PECAM-1 antibody to be titered up or down for optimal performance.1. Staining of formalin-fixed tissues requires boiling tissue sections in 1mM EDTA, pH 7.5-8.5, for 10-20 min followed by cooling at RT for 20 minutes.2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Formula

0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide

Isotype

Mouse IgG1, kappa

Clonality

Monoclonal

Clone Number

C31.7

Purity

Protein G affinity chromatography

Hazard Information

This PECAM-1 antibody is available for research use only.

Entrez

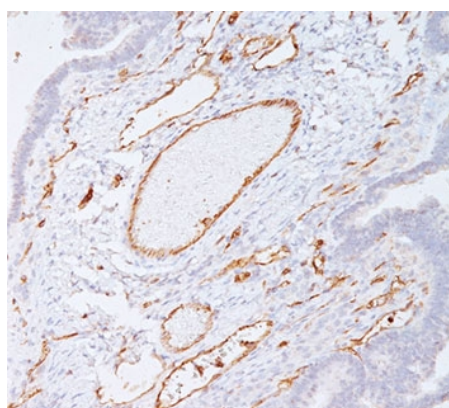
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Dilution Range

Flow cytometry: 1-2ug/million cells,Western blot: 1-2ug/ml,Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT

Expiration Date

12 months from date of receipt.



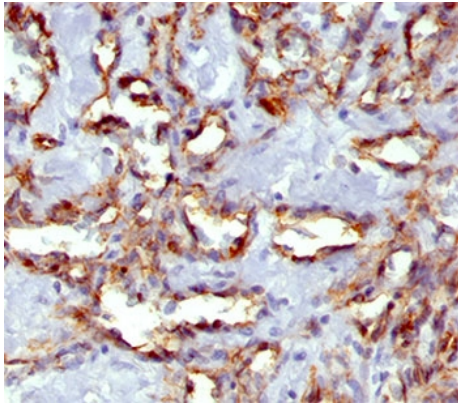
IHC staining of colon carcinoma with PECAM-1 antibody (clone C31.7). Note cell membrane staining of endothelial cells.

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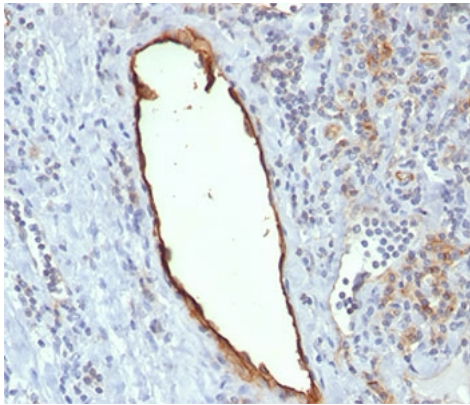
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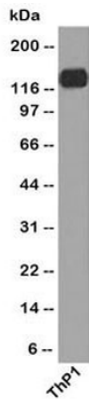
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IHC staining of angiosarcoma with PECAM-1 antibody (clone C31.7).



IHC staining of tonsil tissue with PECAM-1 antibody (clone C31.7).



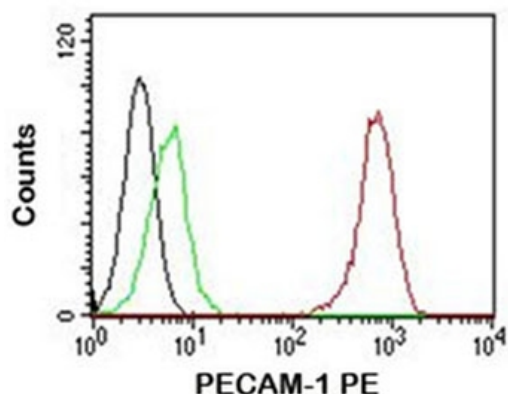
Western blot testing of human samples using PECAM-1 antibody (clone C31.7). Expected molecular weight: 83-130 kDa depending on level of glycosylation.

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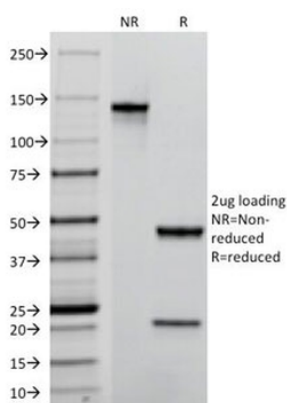
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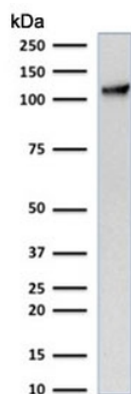
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FACS testing of Jurkat cells: Black = cells alone; Green = isotype control; Red = PECAM-1 antibody PE conjugate



SDS-PAGE Analysis of Purified, BSA-Free PECAM-1 Antibody (clone C31.7). Confirmation of Integrity and Purity of the Antibody.



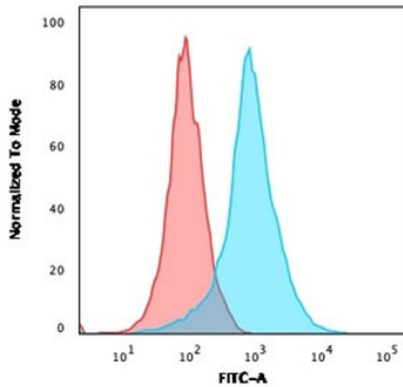
Western blot testing of human Jurkat cell lysate with PECAM-1 antibody (clone C31.7). Expected molecular weight: 83-130 kDa depending on level of glycosylation.

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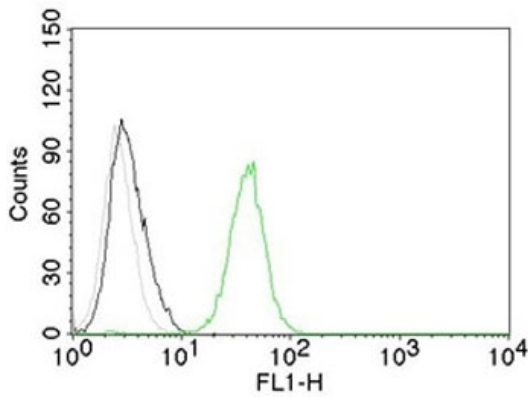
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Flow cytometry testing of PFA-fixed human Jurkat cells with PECAM-1 antibody (clone C31.7); Red = isotype control, Blue = PECAM-1 antibody.



Flow cytometry testing of human Jurkat cells with PECAM-1 antibody (clone C31.7); Black = cells alone, Gray = isotype control, Green = PECAM-1 antibody.

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