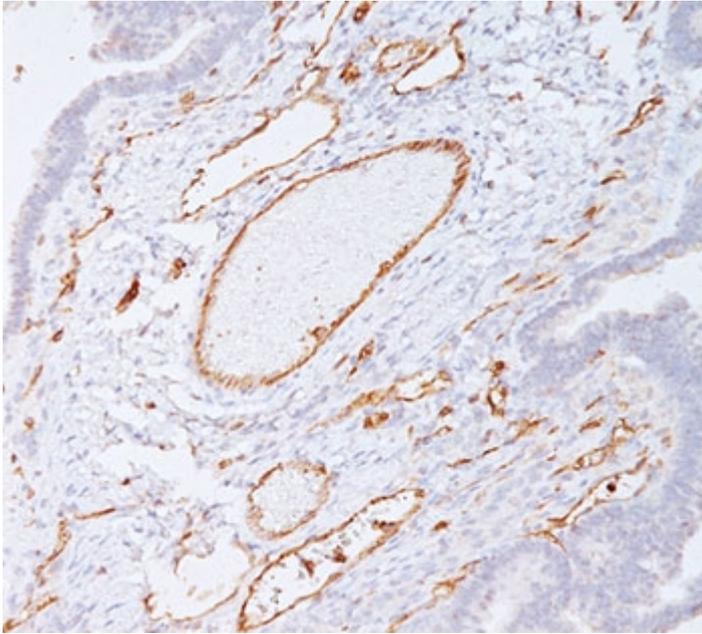


PECAM-1 Antibody / CD31 [clone C31.7] (V2219)

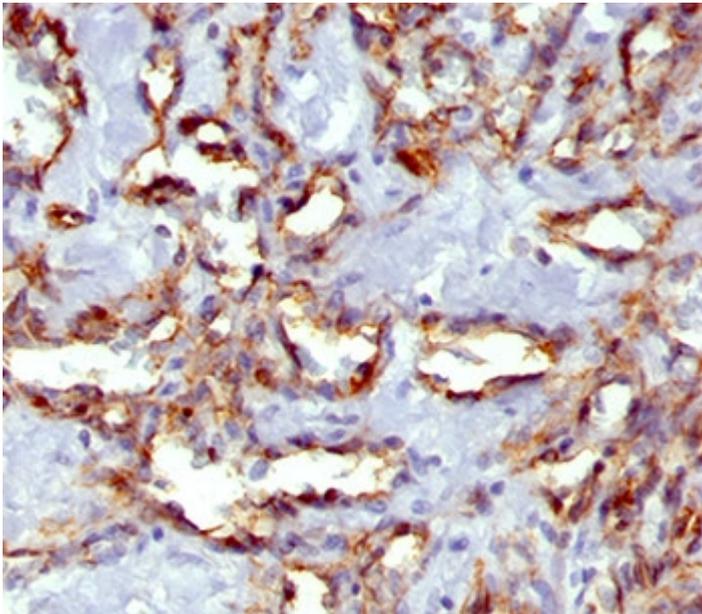
Catalog No.	Formulation	Size
V2219-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2219-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2219SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2219IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

[Bulk quote request](#)

Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	C31.7
Purity	Protein G affinity chromatography
Gene ID	5175
Localization	Cell surface and cytoplasmic
Applications	Flow cytometry : 1-2ug/10 ⁶ cells Western blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This PECAM-1 antibody is available for research use only.



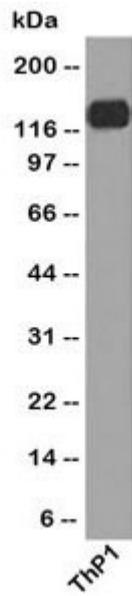
IHC staining of colon carcinoma with PECAM-1 antibody (clone C31.7). Note cell membrane staining of endothelial cells.



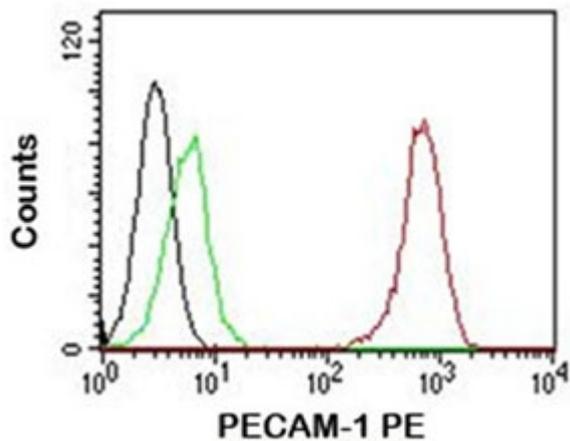
IHC staining of angiosarcoma with PECAM-1 antibody (clone C31.7).



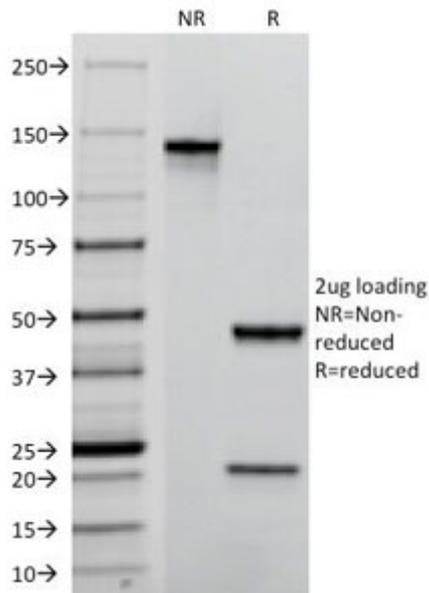
IHC staining of tonsil tissue with PECAM-1 antibody (clone C31.7).



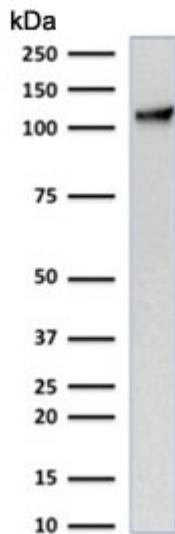
Western blot testing of human samples using PECAM-1 antibody (clone C31.7). Expected molecular weight: 83-130 kDa depending on level of glycosylation.



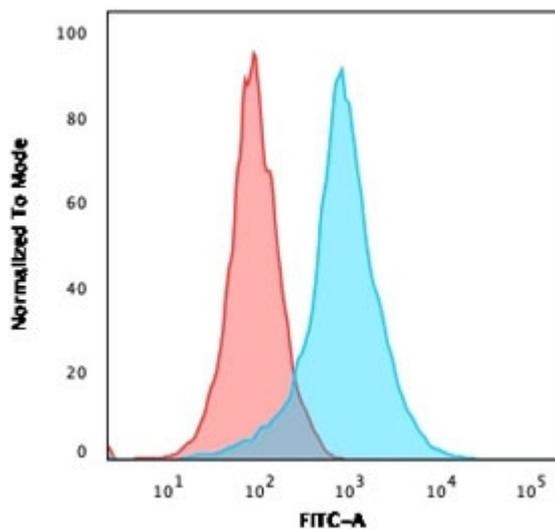
FACS testing of Jurkat cells: Black=cells alone; Green=isotype control; Red=[PECAM-1 antibody PE conjugate](#)



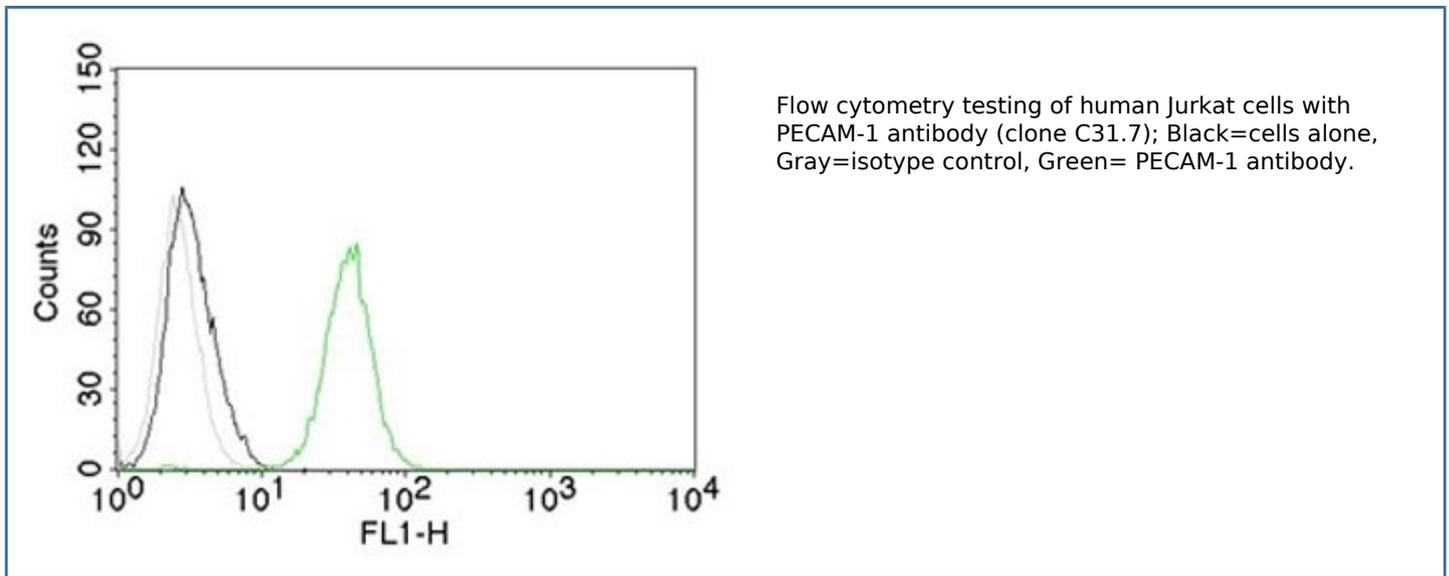
SDS-PAGE Analysis of Purified, BSA-Free PECAM-1 Antibody (clone C31.7). Confirmation of Integrity and Purity of the Antibody.



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.



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



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.

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.

Immunogen

Human recombinant PECAM-1 / CD31 protein was used as the immunogen for this antibody.

Storage

Store the PECAM-1 antibody at 2-8oC.