For Research Use Only

CD31 Recombinant antibody

Catalog Number:80530-1-RR 3 Publications



Purification Method:

Protein A purification

Recommended Dilutions:

WB 1:5000-1:50000 IHC 1:500-1:2000

IF/ICC 1:250-1:1000

CloneNo.:

4N13

Basic Information

Catalog Number: 80530-1-RR Concentration:

Concentration: 1000 ug/ml Source: Rabbit

Immunogen Catalog Number:

AG1787

Isotype:

GenBank Accession Number:

BC022512 GeneID (NCBI): 5175

ENSEMBL Gene ID: ENSG00000261371 UNIPROT ID: P16284 Full Name:

platelet/endothelial cell adhesion

molecule
Calculated MW:
83 kDa
Observed MW:
130 kDa

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA Cited Applications:

IF

Species Specificity: human, mouse Cited Species:

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 **Positive Controls:**

WB: human peripheral blood platelets, MOLT-4 cells,

Jurkat cells

IHC: human tonsillitis tissue, IF/ICC: bEnd.3 cells,

Background Information

Platelet endothelial cell adhesion molecule-1 (PECAM-1, CD31) is a member of the immunoglobulin gene superfamily of cell adhesion molecules. CD31 is a transmembrane glycoprotein that is highly expressed on the surface of the endothelium, making up a large portion of its intracellular junctions. PECAM-1 is also present on the surface of hematopoietic cells and immune cells including platelets, monocytes, neutrophils, natural killer cells, megakaryocytes and some types of T-cell (PMID: 9011572). As well as its role in cell-cell adhesion, PECAM-1 functions as a signaling receptor, and is involved in important physiological events such as nitric oxide production, regulation of T-cell immunity and tolerance, leukocyte transendothelial migration and inflammation and angiogenesis (PMID: 21183735; 20978210; 17872453; 20634489).

Notable Publications

Author	Pubmed ID	Journal	Application
Minghao Du	39826850	Biochim Biophys Acta Mol Basis Dis	IF
Baohua Luo	39761424	Gut Microbes	IF
Yizhou Zhong	39232293	Ecotoxicol Environ Saf	IF

Storage

Storage

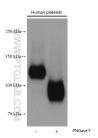
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

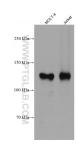
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

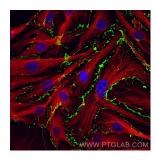
Selected Validation Data



Untreated and PNGase F-treated lysates of human peripheral blood platelets were subjected to SDS PAGE followed by western blot with 80530-1-RR (CD31 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



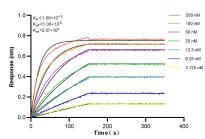
Various lysates were subjected to SDS PAGE followed by western blot with 80530-1-RR (CD31 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed bEnd.3 cells using CD31 antibody (80530-1-RR, Clone: 4N13) at dilution of 1:500 and CoraLite®488-Conjugated Affini Pure Goat Anti-Rabbit IgG(H+L), Alpha Tubulin antibody (66031-1-Ig, Clone: 1E4C11, red).



Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 80530-1-RR (CD31 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 80530-1-RR against Human CD31 were performed. The affinity constant is below 1 pM.