## For Research Use Only

## CD31 Recombinant antibody, PBS Only

Catalog Number:80530-1-PBS



**Purification Method:** 

Protein A purification

CloneNo.:

4N13

**Basic Information** 

Catalog Number: GenBank Accession Number:

 80530-1-PBS
 BC022512

 Concentration:
 GeneID (NCBI):

 1mg/ml
 5175

Source: ENSEMBL Gene ID:
Rabbit ENSG0000261371
Isotype: UNIPROT ID:
IgG P16284
Immunogen Catalog Number: Full Name:

AG1787 platelet/endothelial cell adhesion

Calculated MW: 83 kDa Observed MW: 130 kDa

molecule

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, Indirect ELISA

Species Specificity: human, mouse

## **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).

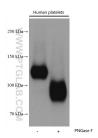
Storage

Storage: Store at -80°C.

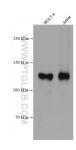
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffe PBS Only

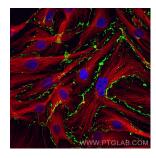
## Selected Validation Data



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. This data was developed using the same antibody clone with 80530-1-PBS in a different storage buffer formulation.



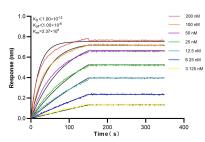
Various lysates were subjected to SDS PAGE followed by western blot with 80530-1-RR (CD31 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 80530-1-PBS in a different storage buffer formulation.



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 AffiniPure Goat Anti-Rabbit IgG(H+L), Alpha Tubulin antibody (66031-1-Ig, Clone: 1E4C11, red). This data was developed using the same antibody clone with 80530-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 80530-1-PBS in a different storage buffer formulation.



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