

For Research Use Only

# CD31 Monoclonal antibody, PBS Only (Capture)

Catalog Number: 66065-2-PBS



## Basic Information

<b>Catalog Number:</b> 66065-2-PBS	<b>GenBank Accession Number:</b> BC022512	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 100ug, Concentration: 1000 ug/ml by 5175 Nanodrop;	<b>GeneID (NCBI):</b> ENSEMBL Gene ID: ENSG00000261371	<b>CloneNo.:</b> 3F8E2
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P16284	
<b>Isotype:</b> IgG1	<b>Full Name:</b> platelet/endothelial cell adhesion molecule	
<b>Immunogen Catalog Number:</b> AG19730	<b>Calculated MW:</b> 83 kDa	
	<b>Observed MW:</b> 120-130 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, IF-P, Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human

## Product Information

66065-2-PBS targets CD31 as part of a matched antibody pair:

MP50319-2: 66065-2-PBS capture and 66065-5-PBS detection (validated in Cytometric bead array)

Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## 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

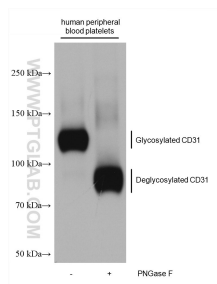
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

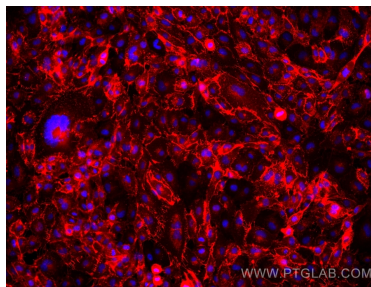
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

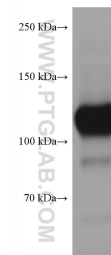
## Selected Validation Data



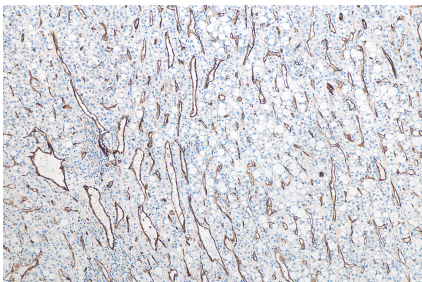
Untreated and PNGase F-treated lysates of human peripheral blood platelets were subjected to SDS PAGE followed by western blot with 66065-2-Ig (CD31 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. PNGase F was obtained from Atagenix (cat.NO. ata808). This data was developed using the same antibody clone with 66065-2-PBS in a different storage buffer formulation.



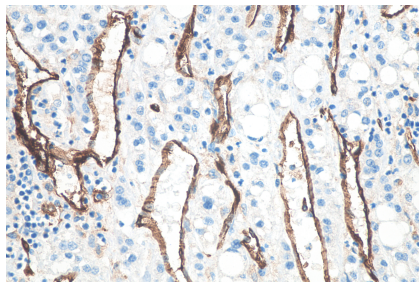
Immunofluorescent analysis of (4% PFA) fixed HUVEC cells using CD31 antibody (66065-2-Ig, Clone: 3F8E2 ) at dilution of 1:1000 and Multi-rAb CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004 ). This data was developed using the same antibody clone with 66065-2-PBS in a different storage buffer formulation.



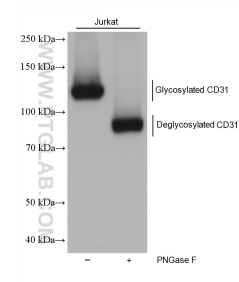
human peripheral blood platelets were subjected to SDS PAGE followed by western blot with 66065-2-Ig (CD31 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66065-2-PBS in a different storage buffer formulation.



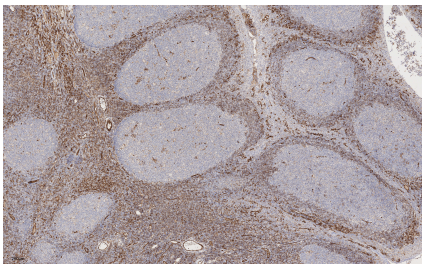
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66065-2-Ig (CD31 antibody) at dilution of 1:10000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66065-2-PBS in a different storage buffer formulation.



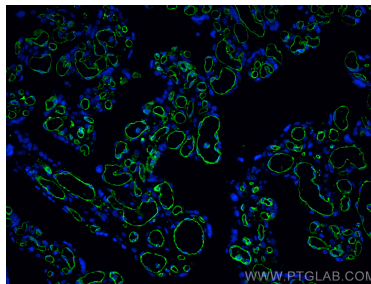
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66065-2-Ig (CD31 antibody) at dilution of 1:10000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66065-2-PBS in a different storage buffer formulation.



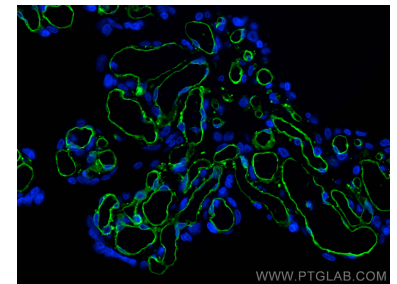
Untreated and PNGase F-treated lysates of Jurkat cells were subjected to SDS PAGE followed by western blot with 66065-2-Ig (CD31 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66065-2-PBS in a different storage buffer formulation.



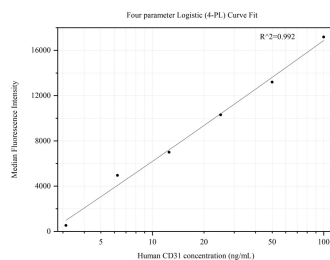
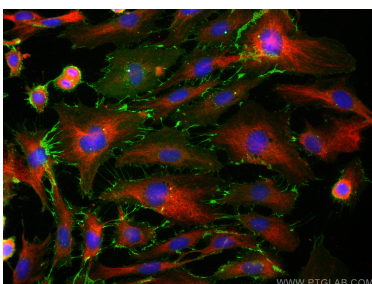
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 66065-2-Ig (CD31 antibody) at dilution of 1:10000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66065-2-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human placenta tissue using CD31 antibody (66065-2-Ig, Clone: 3F8E2 ) at dilution of 1:800 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66065-2-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human placenta tissue using CD31 antibody (66065-2-Ig, Clone: 3F8E2 ) at dilution of 1:800 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66065-2-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed HUVEC cells using CD31 antibody (66065-2-Ig, Clone: 3F8E2 ) at dilution of 1:2000 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002), Beta Tubulin antibody (80713-1-RR, Clone: 2013, red). This data was developed using the same antibody clone with 66065-2-PBS in a different storage buffer formulation.

Cytometric bead array standard curve of MP50319-2, CD31 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 66065-2-PBS. Detection antibody: 66065-5-PBS. Standard:Ag1787. Range: 3.125-200 ng/mL