For Research Use Only

## CoraLite® Plus 488-conjugated CD31 Monoclonal antibody



Catalog Number: CL488-66065 3 Publications

**Basic Information** 

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BC022512 Concentration: GeneID (NCBI): 1000 ug/ml 5175

Source: **ENSEMBL Gene ID:** ENSG00000261371 Mouse **UNIPROT ID:** Isotype: lgG1 P16284

Immunogen Catalog Number: **Full Name:** AG1787 platelet/endothelial cell adhesion

> molecule Calculated MW: 83 kDa

GenBank Accession Number:

**Purification Method:** 

Protein A purification CloneNo.:

3F8E2 **Recommended Dilutions:** IF-P: 1:200-1:800

IF/ICC: 1:50-1:500 Excitation/Emission maxima

wavelengths:

493 nm / 522 nm

**Applications** 

**Tested Applications:** 

IF/ICC, IF-P **Cited Applications:** 

Species Specificity:

human **Cited Species:** human, rat

Positive Controls:

IF-P: human tonsillitis tissue, human colon cancer tissue, human placenta tissue

IF/ICC: Lymphatic endothelial cells cells, HUVEC 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). This antibody is conjugated with CL488, Ex/Em 488 nm/515 nm.

## **Notable Publications**

Author	Pubmed ID	Journal	Application
Lan Li	39422032	Mol Med Rep	IF
Jun He	38232667	Biochem Biophys Res Commun	IF
Jun-Qi Luo	37542027	Cell Death Dis	IF

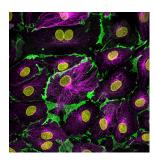
Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

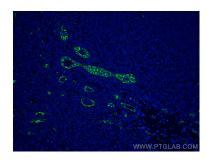
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

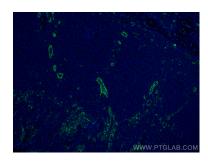
## **Selected Validation Data**



Lymphatic endothelial cells were stained for CD31 (green, Cat. No CL488-66065, 1:200) and alpha tubulin (magenta, Cat. 11224-1-AP, 1:200) with DAPI as a counterstain for visualizing the nucleus (yellow). CD31 is an endothelial cell adhesion protein and was conjugated to Coralite-488 fluorescent dye to allow for direct visualization. Alpha tubulin is a cytoskeletal protein important in cell division and migration and was visualized with an Alexa Fluor 568 secondary antibody.



Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using Coralite® Plus 488 CD31 antibody (CL488-66065, Clone: 2A1E2) at dilution of 1:400.



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