

CD31 Monoclonal Antibody

Catalog No: YM0118

Reactivity: Human;Rabbit

Applications: WB;IHC;IF;ELISA

Target: CD31

Fields: >>Cell adhesion molecules;>>Leukocyte transendothelial

migration;>>Malaria;>>Fluid shear stress and atherosclerosis

Gene Name: PDGFRA

Protein Name: Alpha-type platelet-derived growth factor receptor

P16284

Q08481

Human Gene Id: 5175

Human Swiss Prot

No:

Mouse Swiss Prot

No:

Immunogen: Purified recombinant fragment of human CD31 expressed in E. Coli.

Specificity: CD31 Monoclonal Antibody detects endogenous levels of CD31 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Monoclonal, Mouse

Dilution: WB 1:500 - 1:2000. IHC 1:200 - 1:1000. IF 1:200 - 1:1000. ELISA: 1:10000. Not

yet tested in other applications.

Purification : Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 83kD

1/3



Cell Pathway:

Cell adhesion molecules (CAMs);Leukocyte transendothelial migration;

P References:

- 1. Mayr U et al. Circ Res 98:412-20 (2006).
- 2. Bingle L et al. Br J Cancer 94:101-7 (2006).
- 3. Wynne F et al. Reproduction 131:721-32 (2006).

Background:

The protein encoded by this gene is found on the surface of platelets, monocytes, neutrophils, and some types of T-cells, and makes up a large portion of endothelial cell intercellular junctions. The encoded protein is a member of the immunoglobulin superfamily and is likely involved in leukocyte migration, angiogenesis, and integrin activation. [provided by RefSeq, May 2010],

Function:

function: This protein is a cell adhesion molecule expressed on platelets and at endothelial cell intercellular junctions., online information: CD31 entry, online information: PECAM-1, online information: The Singapore human mutation and polymorphism database, PTM: Phosphorylated on Ser and Tyr residues after cellular activation., similarity: Contains 6 Ig-like C2-type (immunoglobulin-like) domains., tissue specificity: Long isoform predominates all tissues examined, isoform Delta12 was detected only in trachea and isoform Delta14-15 only in lung, isoform Delta14 was detected in all tissues examined with the strongest expression in heart.,

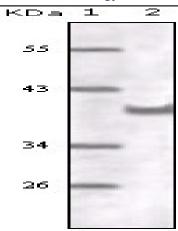
Subcellular Location:

Cell membrane; Single-pass type I membrane protein. Cell surface expression on neutrophils is down-regulated upon fMLP or CXCL8/IL8-mediated stimulation. .; [Isoform Long]: Cell membrane; Single-pass type I membrane protein. Membrane raft. Cell junction. Localizes to the lateral border recycling compartment (LBRC) and recycles from the LBRC to the junction in resting endothelial cells. .; [Isoform Delta15]: Cell junction. Localizes to the lateral border recycling compartment (LBRC) and recycles from the LBRC to the junction in resting endothelial cells.

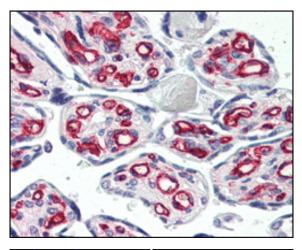
Expression:

Expressed on platelets and leukocytes and is primarily concentrated at the borders between endothelial cells (PubMed:18388311, PubMed:21464369). Expressed in human umbilical vein endothelial cells (HUVECs) (at protein level) (PubMed:19342684, PubMed:17580308). Expressed on neutrophils (at protein level) (PubMed:17580308). Isoform Long predominates in all tissues examined (PubMed:12433657). Isoform Delta12 is detected only in trachea (PubMed:12433657). Isoform Delta14-15 is only detected in lung (PubMed:12433657). Isoform Delta14 is detected in all tissues examined with the strongest expression in heart (PubMed:12433657). Isoform Delta15 is expressed in brain, testis, ovary, cell surface of platelets, human umbilical vein endothelial cells (HUVECs), Jurkat T-cell leukemia, human erythroleuk

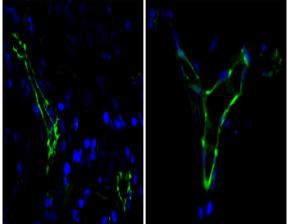
Products Images



Western Blot analysis using CD31 Monoclonal Antibody against truncated CD31 recombinant protein.



Immunohistochemistry analysis of paraffin-embedded human placenta tissues with AEC staining using CD31 Monoclonal Antibody.



Immunofluorescence analysis of paraffin-embedded human lung cancer(left) and breast cancer(right) cells using CD31 Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye.