

CD31 Polyclonal Antibody

Catalog No: YT0752

Reactivity: Human; Mouse

Applications: WB;IHC;IF;ELISA

Target: CD31

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

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

Gene Name: PECAM1

Protein Name: Platelet endothelial cell adhesion molecule

P16284

Q08481

Human Gene Id: 5175

Human Swiss Prot

No:

Mouse Gene Id: 18613

Mouse Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

PECAM-1. AA range:686-735

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

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

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC: 1:100-300 ELISA: 1:20000. IF 1:100-300 Not yet

tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.



Concentration: 1 mg/ml

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

Observed Band: 85-130kD

Cell Pathway: Cell adhesion molecules (CAMs);Leukocyte transendothelial migration;

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 lg-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

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

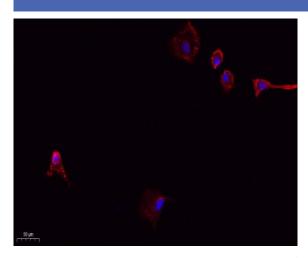
(PubMed:12433657). Isoform Delta14 is detected in all tissues examined with the strongest expression in heart (PubMed:12433657). Isoform Delta15 is expressed in brain, testis, ovary, cell surface of platelets, human umbilical vein endothelial

cells (HUVECs), Jurkat T-cell leukemia, human erythroleuk

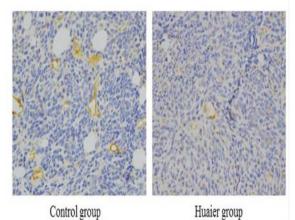
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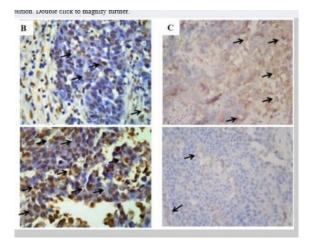
Products Images



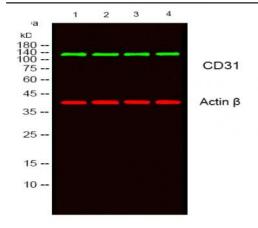
Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.



Li, Yaming, et al. "Huaier extract suppresses breast cancer via regulating tumor-associated macrophages." Scientific reports6 (2016): 20049.



Wang, Lijuan, et al. "Establishment and evaluation of the VX2 orthotopic lung cancer rabbit model: a ultra-minimal invasive percutaneous puncture inoculation method." The Korean Journal of Physiology & Pharmacology 22.3 (2018): 291-300.

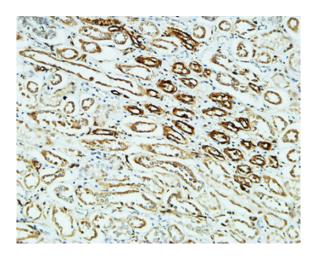


Western blot analysis of lysates from 1) HepG2, 2) K562,3) L929,4) MOUSE-BRAIN cells, \center{Mouse} Green primary antibody was diluted at 1:1000, 4° over night, secondary antibody(cat:RS23920)was diluted at 1:10000, 37° 1hour. Red Actin \center{Mouse} Monoclonal Antibody(5B7) (cat:YM3028) antibody was diluted at 1:5000 as loading control, 4° over night, secondary antibody(cat:RS23710)was diluted at 1:10000, 37° 1hour.

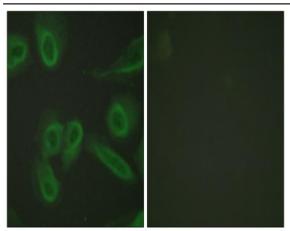
HEPG2 K562 L929 MOUSE-BRAIN



Western Blot analysis of various cells using CD31 Polyclonal Antibody diluted at 1:1000



Immunohistochemical analysis of paraffin-embedded Human kidney. 1, Antibody was diluted at 1:400(4° overnight). 2, Highpressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Immunofluorescence analysis of HeLa cells, using PECAM-1 Antibody. The picture on the right is blocked with the synthesized peptide.