



# CD31 Polyclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-16944                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Reactivity</b>                  | Human;Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Applications</b>                | WB;IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Gene Name</b>                   | PECAM1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human PECAM-1. AA range:686-735                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Specificity</b>                 | CD31 Polyclonal Antibody detects endogenous levels of CD31 protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Dilution</b>                    | Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. IF 1:100-300<br>Not yet tested in other applications.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Synonyms</b>                    | PECAM1;PECAM 1;PECA1;GPIIA';GPIIA;CD31;Platelet endothelial cell adhesion molecule;PECAM-1;EndoCAM;CD antigen CD31                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Observed Band</b>               | 85-130kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Calculated Molecular Weight</b> | 85-130kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Cell Pathway</b>                | 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. |
| <b>Tissue Specificity</b>          | 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

#### 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.,

#### 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]

#### matters needing attention

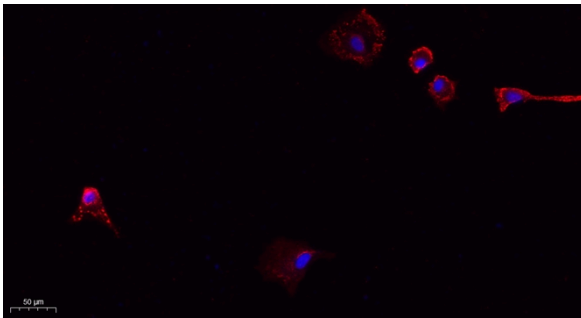
Avoid repeated freezing and thawing!

#### Usage suggestions

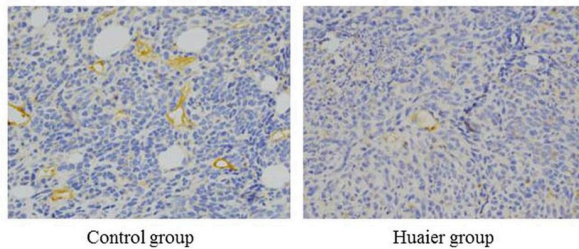
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



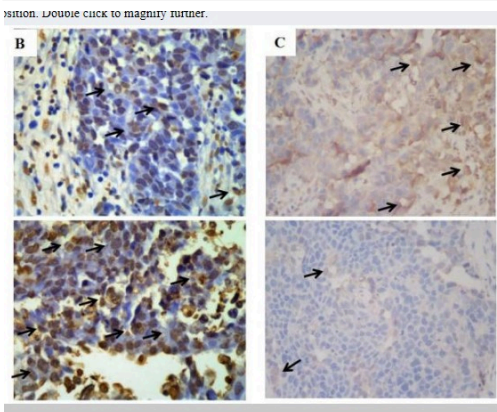
## Products Images



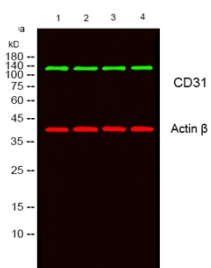
Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.



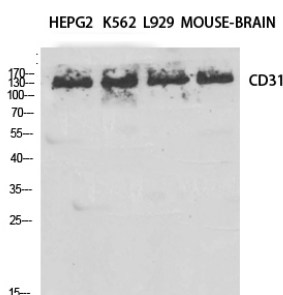
Li, Yaming, et al. "Huaier extract suppresses breast cancer via regulating tumor-associated macrophages." Scientific reports6 (2016): 20049.



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, (Green) primary antibody was diluted at 1:1000, 4° over night, secondary antibody(cat:RS23920)was diluted at 1:10000, 37° 1hour. (Red) Actin β 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.



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