



# CD31 (ABT-CD31) mouse mAb

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| <b>Catalog No</b>         | BYab-15221                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Isotype</b>            | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Reactivity</b>         | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Applications</b>       | WB;IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Gene Name</b>          | PECAM1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Protein Name</b>       | Platelet endothelial cell adhesion molecule (PECAM-1) (EndoCAM) (GPIIA') (PECA1) (CD antigen CD31)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Immunogen</b>          | Synthesized peptide derived from human CD31                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Specificity</b>        | This antibody detects endogenous levels of human CD31. Heat-induced epitope retrieval (HIER) Citrate buffer of pH6.0 was highly recommended as antigen repair method in paraffin section                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Formulation</b>        | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Source</b>             | Mouse, Monoclonal/IgG1, Kappa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Purification</b>       | The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Dilution</b>           | Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/200 - 1/1000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. 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>           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Observed Band</b>      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <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                                                                                                                                                                                                  |

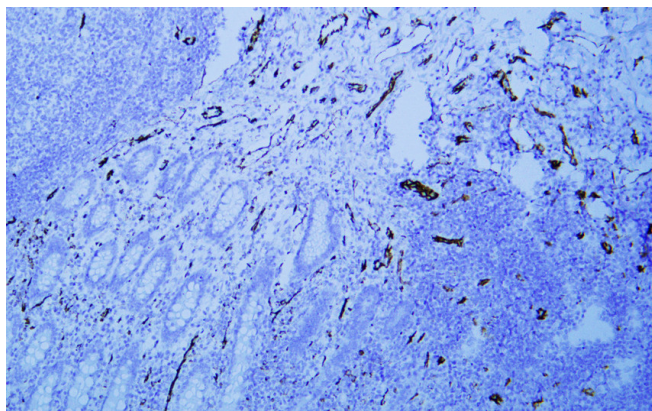
**Nanjing BYabs science technology Co.,Ltd**



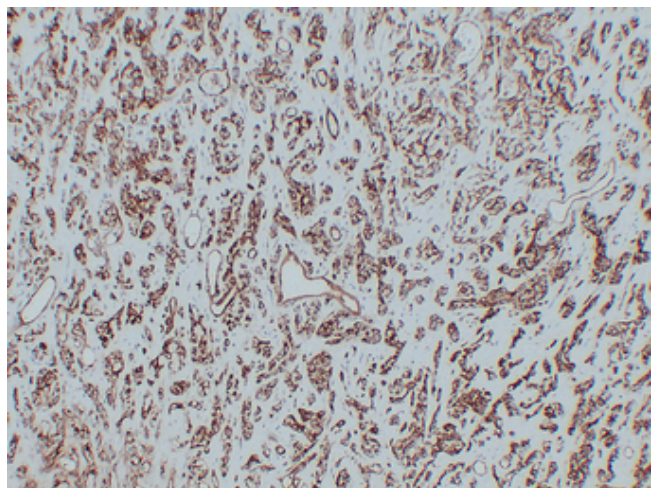
|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                           | (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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |



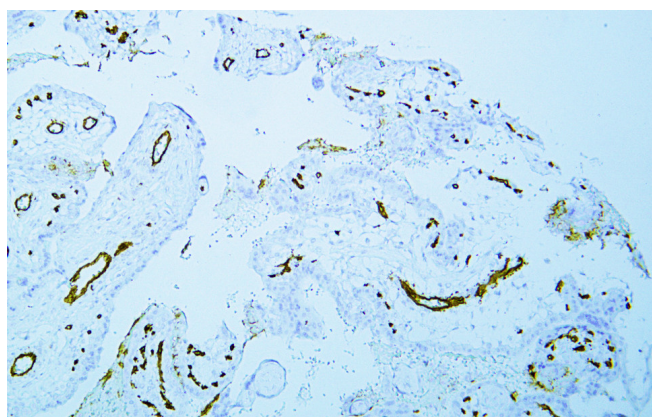
## Products Images



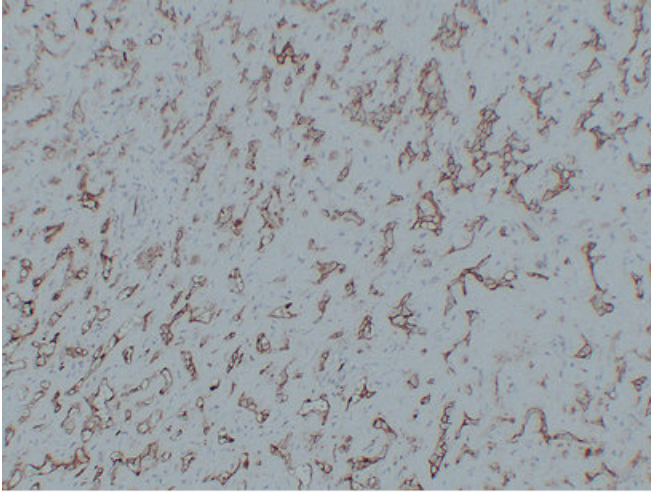
Western Blot analysis of Various whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-CD31 (ABT-CD31)antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: THP-1 Lane 2: Hela  
Predicted band size: 83kDa Observed band size: 130kDa



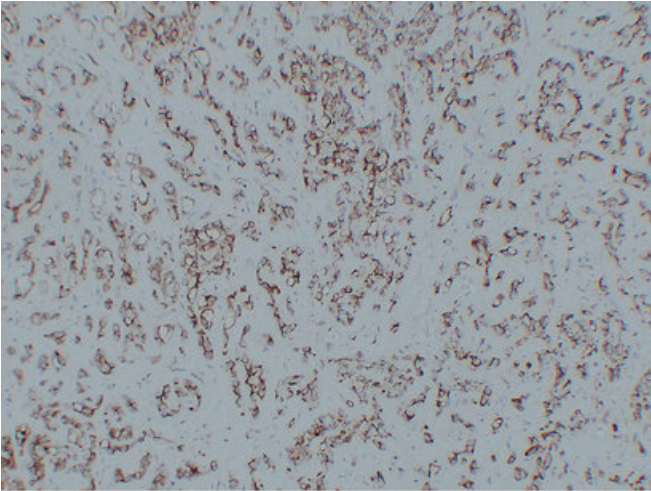
Human Hemangioendothelioma tissue was stained with Anti-CD31 (ABT-CD31) Antibody



Human placenta tissue was stained with Anti-CD31 (ABT-CD31) Antibody



Immunohistochemical analysis of paraffin-embedded Hemangioendothelioma. 1, Antibody was diluted at 1:200(4<sup>°</sup> overnight). 2, Citric acid ,pH6.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



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