

## Basic Information

|                           |  |            |
|---------------------------|--|------------|
| <b>Product Name</b>       | Anti-CD31/PECAM1 Antibody  |            |
| <b>Gene Name</b>          | PECAM1   |            |
| <b>Source</b>             | Rabbit   |            |
| <b>Clonality</b>          | Polyclonal   |            |
| <b>Isotype</b>            | IgG  |            |
| <b>Species Reactivity</b> | human  |            |
| <b>Tested Application</b> | WB, IHC, IF, FCM   |            |
| <b>Contents</b>           | 500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.  |            |
| <b>Immunogen</b>          | A synthetic peptide corresponding to a sequence at the C-terminus of rat CD31.   |            |
| <b>Concentration</b>      | 500 ug/ml  |            |
| <b>Purification</b>       | Immunogen affinity purified.   |            |
| <b>Observed MW</b>        | 120-130 kDa  |            |
| <b>Dilution Ratios</b>    | Western blot (WB):   | 1:500-2000 |
|                           | Immunohistochemistry (IHC):  | 1:100-500  |
|                           | Immunofluorescence (IF):   | 1:50-400   |
|                           | Flow Cytometry (Fixed):  | 1:50-200   |
|                           | (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user. |            |

## Storage

12 months from date of receipt, -20°C as supplied.

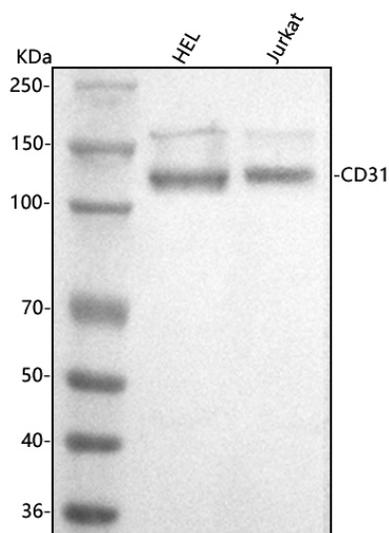
## Background Information

PECAM-1 (Platelet endothelial cell adhesion molecule), also known as cluster of differentiation 31 (CD31) is a protein that in human is encoded by the PECAM1 gene found on chromosome 17. PECAM1 is a member of the immunoglobulin (Ig) superfamily that is expressed on the surface of circulating platelets, monocytes, neutrophils, and particular T-cell subsets. Using a PCR-based analysis of somatic cell hybrids, Gumina et al. (1996) mapped PECAM1 to chromosome 17 in the region 17q23-qter. By fluorescence in situ hybridization, they assigned the PECAM1 locus specifically to 17q23. Several adhesion molecules expressed on platelets and endothelium also localized to 17q. Xie and Muller (1996) mapped the Pecam1 gene to mouse chromosome 6, region F3-G1, by fluorescence in situ hybridization. PECAM-1 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, and PECAM-1 plays a key role in removing aged neutrophils from the body.

## Reference

Anti-CD31/PECAM1 Antibody被引用在13文献中。

## Selected Validation Data

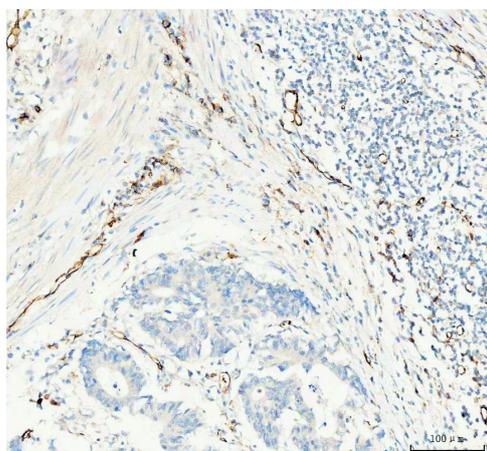


Western blot analysis of CD31/PECAM1 using anti-CD31/PECAM1 antibody (BA1346). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HEL whole cell lysates,

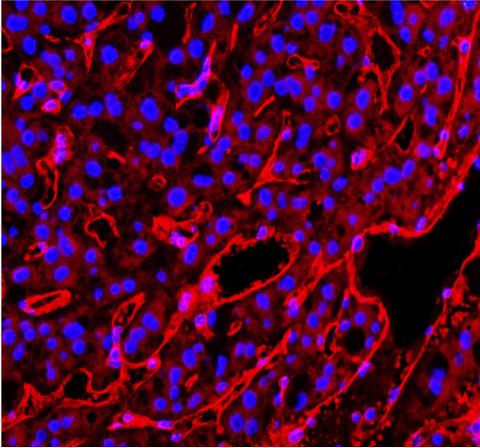
Lane 2: human Jurkat whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-CD31/PECAM1 antigen affinity purified polyclonal antibody (BA1346) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for CD31/PECAM1 at approximately 120 kDa. The expected band size for CD31/PECAM1 is at 83 kDa.

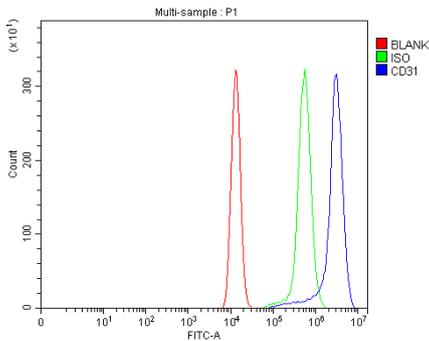


IHC analysis of CD31/PECAM1 using anti-CD31/PECAM1 antibody (BA1346)

CD31/PECAM1 was detected in a paraffin-embedded section of human colorectal adenocarcinoma tissue. The tissue section was incubated with rabbit anti-CD31/PECAM1 Antibody (BA1346) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of CD31/PECAM1 using anti-CD31/PECAM1 antibody (BA1346). CD31/PECAM1 was detected in a paraffin-embedded section of human liver cancer tissue. The tissue section was incubated with rabbit anti-CD31/PECAM1 Antibody (BA1346) at a dilution of 1:100. Dylight594-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1142) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of HEL cells using anti-CD31/PECAM1 antibody (BA1346).

Overlay histogram showing HEL cells stained with BA1346 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-CD31/PECAM1 Antibody (BA1346, 1:100). DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 1:100) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG (Catalog # BA1045) (1:100) used under the same conditions. Unlabelled sample (Red line) was also used as a control.