

Basic Information

Product Name	Anti-CD31/PECAM1 Antibody	
Gene Name	PECAM1	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB,IHC,FCM(Intracellular)	
Contents	500 ug/ml antibody with PBS , 0.02% NaN ₃ , 1 mg BSA and 50% glycerol.	
Immunogen	E.coli-derived human CD31 recombinant protein (Position: Q28-G382). Human CD31 shares 65% and 68% amino acid (aa) sequences identity with mouse and rat CD31, respectively.	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	90, 130KD	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 Flow Cytometry(Intracellular): 1-3 µg/1x10 ⁶ cells (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. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

CD31 also known as Platelet endothelial cell adhesion molecule (PECAM-1), is a protein that in human is encoded by the PECAM1 gene. Encoded protein is a member of the immunoglobulin superfamily, CD31 is mapped to 17q23.3. CD31 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. It is demonstrated that CD31 expression on human PBSCs may positively affect both neutrophil and platelet engraftment. Meanwhile, CD31 is involved in leukocyte migration and angiogenesis, which are key components of venous thrombus resolution.

Reference

Anti-CD31/PECAM1 Antibody被引用在1文献中。

Selected Validation Data

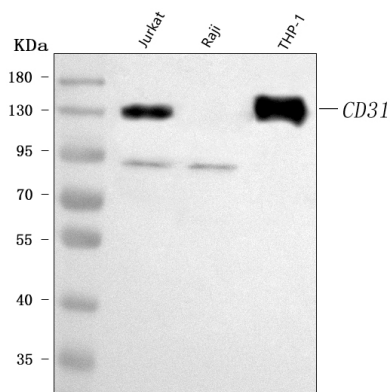


Figure 1. Western blot analysis of anti-PECAM-1/CD31 antibody (PB9094). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Jurkat whole cell lysates,

Lane 2: human Raji whole cell lysates,

Lane 3: human THP-1 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-PECAM-1/CD31 antigen affinity purified polyclonal antibody (PB9094) 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 PECAM-1/CD31 at approximately 90 kDa, 130 kDa. The expected band size for PECAM-1/CD31 is at 83 kDa.

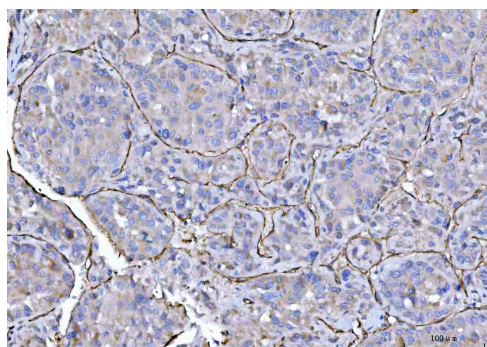


Figure 2. IHC analysis of PECAM-1/CD31 using anti-PECAM-1/CD31 antibody (PB9094).

PECAM-1/CD31 was detected in a paraffin-embedded section of human hepatocellular carcinoma tissue. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1022) as the chromogen.

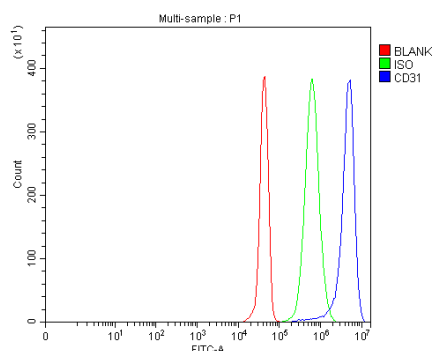


Figure 4. Flow Cytometry analysis of Jurkat cells using anti-PECAM-1/CD31 antibody (PB9094).

Overlay histogram showing Jurkat cells stained with PB9094 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-PECAM-1/CD31 Antibody (PB9094, 1 µg/1x10⁶ cells). DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 µg/1x10⁶ cells) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG (Catalog # BA1045) (1 µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.