

Basic Information

Product Name	Anti-CD9 Antibody	
Gene Name	CD9	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E. coli-derived mouse CD9 recombinant protein (Position: T110-I193). Mouse CD9 shares 77.4% and 86.9% amino acid (aa) sequence identity with human and rat CD9, respectively.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	25 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/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. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

CD9 antigen is a protein that in humans is encoded by the CD9 gene. CD9 is a cell surface glycoprotein that is known to complex with integrins and other transmembrane 4 superfamily proteins. It is found on the surface of exosomes. It can modulate cell adhesion and migration and also trigger platelet activation and aggregation. In addition, the protein appears to promote muscle cell fusion and support myotube maintenance. This protein also seems to be a key part in the egg-sperm fusion during mammalian fertilization. While oocytes are ovulated, CD9-deficient oocytes are not properly fused with sperm upon fertilization. CD9 is located in the microvillar membrane

of the oocytes and also appears to intervene in maintaining the normal shape of oocyte microvilli.

Reference

Anti-CD9 Antibody 被引用在4文献中。

Selected Validation Data

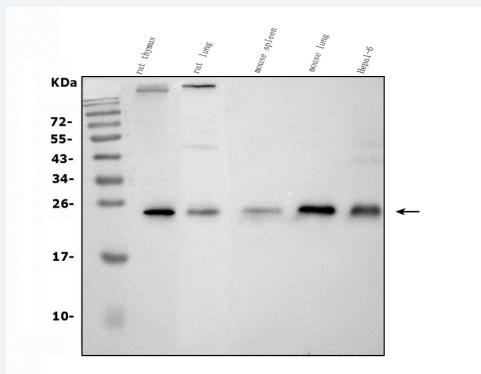


Figure 1. Western blot analysis of CD9 using anti-CD9 antibody (PB0977). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat thymus tissue lysates,

Lane 2: rat lung tissue lysates,

Lane 3: mouse spleen tissue lysates,

Lane 4: rat lung tissue lysates,

Lane 5: mouse HEPA1-6 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-CD9 antigen affinity purified polyclonal antibody (PB0977) 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 CD9 at approximately 25 kDa. The expected band size for CD9 is at 25 kDa.

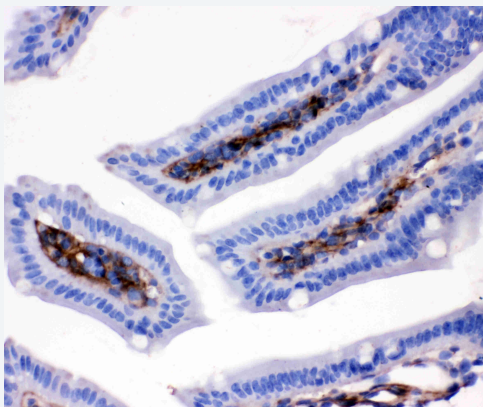


Figure 3. IHC analysis of CD9 using anti-CD9 antibody (PB0977).

CD9 was detected in a paraffin-embedded section of mouse intestine tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-CD9 Antibody (PB0977) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1022) as the chromogen.

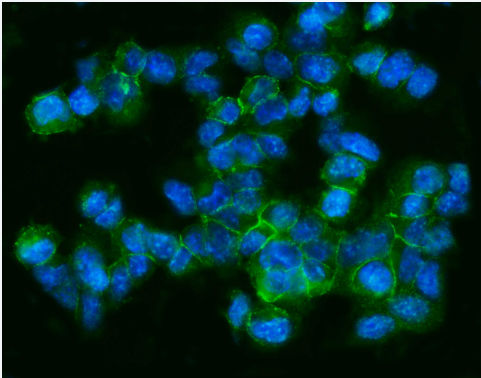


Figure 4. IF analysis of CD9 using anti-CD9 antibody (PB0977). CD9 was detected in an immunocytochemical section of Hepa1-6 cells. The section was incubated with rabbit anti-CD9 Antibody (PB0977) at a dilution of 1:100. DyLight®488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).

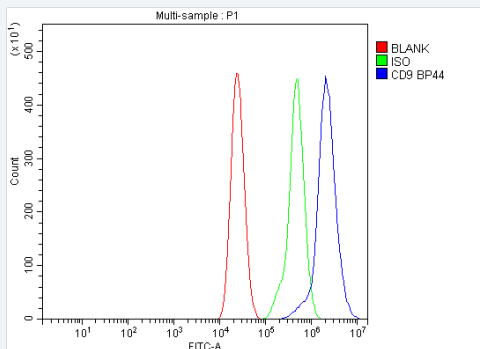


Figure 5. Flow Cytometry analysis of Raw264.7 cells using anti-CD9 antibody (PB0977).

Overlay histogram showing Raw264.7 cells stained with PB0977 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-CD9 Antibody (PB0977) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.