

Basic Information

Product Name	Anti-Emmprin/CD147/BSG Antibody	
Gene Name	BSG	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	mouse, rat	
Tested Application	WB, IHC, IF, FCM, ELISA	
Contents	500 ug/ml antibody with PBS , 0.02% NaN ₃ , 1 mg BSA and 50% glycerol.	
Immunogen	E.coli-derived mouse Bsg recombinant protein (Position: S39-R325).	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	35-60KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 Immunofluorescence (IF): 1:50-400 Flow cytometry (FCM): 1-3 µg/1x10 ⁶ cells ELISA: 1:100-1000 (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

Emmprin, extracellular matrix metalloproteinase inducer, also known as Emmprin (BSG) or cluster of differentiation 147 (CD147) is a protein that in humans is encoded by the Emmprin gene. The human BSG gene is mapped to 19p13.3. This protein is a determinant for the Ok blood group system. BSG has been shown to be an essential receptor on red blood cells for the malaria parasite. It is a member of the immunoglobulin superfamily, with a structure related to the putative primordial form of the family. As members of the immunoglobulin superfamily, it plays fundamental roles in intercellular recognition involved in various immunologic phenomena, differentiation, and development. BSG is thought also to play a role in intercellular recognition. It also regulates several distinct functions, such as spermatogenesis, expression of the monocarboxylate transporter and the responsiveness of lymphocytes. BSG is a type I integral membrane receptor that has many ligands, including the cyclophilin (CyP) proteins Cyp-A and CyP-B and certain integrins. It is expressed by many cell types, including epithelial cells, endothelial cells and leukocytes.

Selected Validation Data

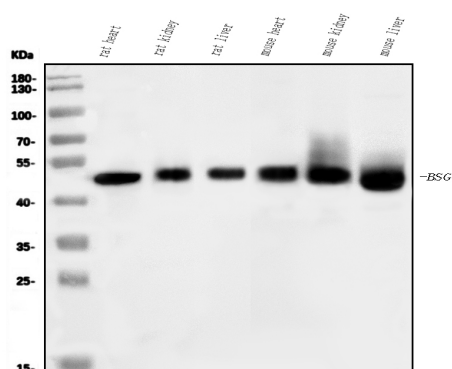


Figure 1. Western blot analysis of anti- emmprin/CD147 Antibody (A00248-3). The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: rat heart tissue lysates,

Lane 2: rat kidney tissue lysates,

Lane 3: rat liver tissue lysates,

Lane 4: mouse heart tissue lysates,

Lane 5: mouse kidney tissue lysates,

Lane 6: mouse liver tissue lysates.

Use rabbit anti- Bsg 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for Bsg at approximately 45KD. The expected band size for Bsg is at 42KD.

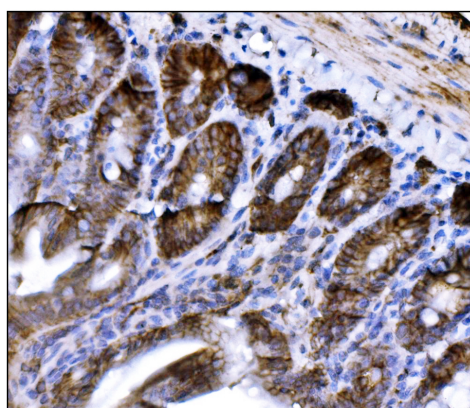


Figure 2. IHC analysis using anti- emmprin/CD147 Antibody (A00248-3). detected in paraffin-embedded section of mouse colon tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

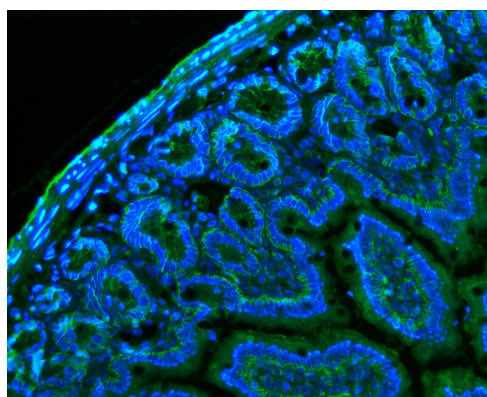


Figure 6. IF analysis using anti- emmprin/CD147 Antibody (A00248-3). detected in paraffin-embedded section of mouse colon tissue. The tissue section were stained using the Dylight488-conjugated Anti-rabbit IgG Secondary Antibody (green) (Catalog # BA1127) and counterstained with DAPI (blue).

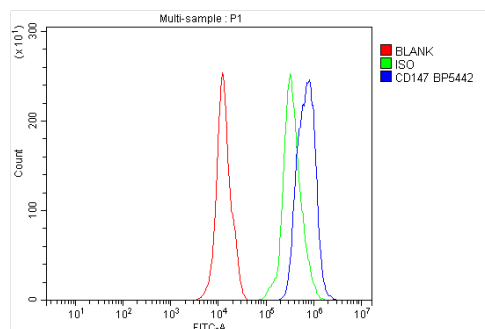


Figure 8. Flow cytometry analysis of m.PBMC cell (1x10⁶) DyLight 488 conjugated goat anti- rabbit IgG(blue) was used as secondary antibody.Isotype control antibody (Green line) was rabbit IgG DyLight 488. Unlabelled sample (Red line).