

Rabbit CD147/Emmprin Polyclonal Antibody | anti-BSG antibody

Anti-CD147/Emmprin Antibody

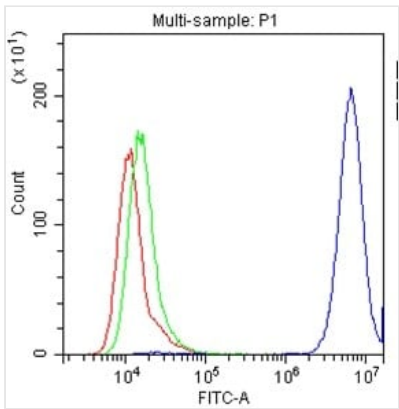
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA11678	Rabbit	Human, Mouse, Rat	Western Blot, Immunohistochemistry

PRODUCT SYNONYMS

CD147/Emmprin; Polyclonal Antibody; Anti-CD147/Emmprin Antibody; 5A11 antigen; 5F7; BASI; Basigin; basigin (Ok blood group); Basigin(Ok blood group); BSG; CD147 antigen; Collagenase stimulatory factor; Emmprin; HT7 antigen; Leukocyte activation antigen M6; neurothelin; OK blood group antigen; OX-47 antigen; P35613; TCSF; anti-BSG antibody

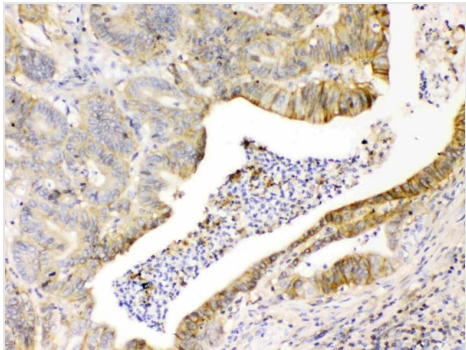
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Sequence Length	269
Applicable Applications for anti-BSG antibody	WB (Western Blot), IHC (Immunohistochemistry)
Application Notes	Western Blot: 0.1-0.5ug/ml Immunohistochemistry(IHC) Paraffin: 0.5-1ug/ml
Notes	Tested Species: In-house tested species with positive results. By Heat: Boiling the paraffin sections in 10mM citrate buffer, pH6.0, for 20mins is required for the staining of formalin/paraffin sections. Other applications have not been tested.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Immunogen	E Coli-derived human CD147/Emmprin recombinant protein (Position: E138-A323). Human CD147/Emmprin shares 51.1% and 51.9% amino acid (aa) sequence identity with mouse and rat CD147/Emmprin, respectively.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



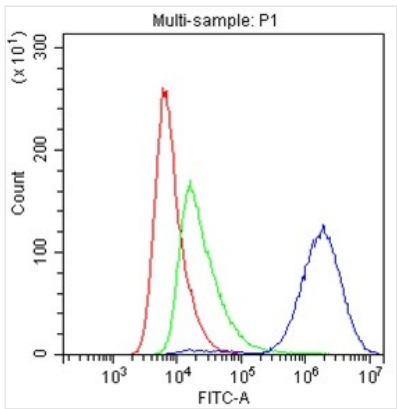
FCM (Flow Cytometry)

Figure 6. Flow Cytometry analysis of Hela cells using anti-CD147/Emmprin antibody (AAA11678).Overlay histogram showing Hela cells stained with AAA11678 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CD147/Emmprin Antibody (AAA11678,1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight 488 conjugated goat anti-rabbit IgG (5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



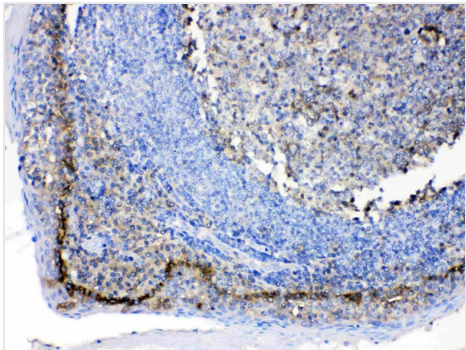
IHC (Immunohistochemistry)

Figure 4. IHC analysis of CD147/Emmprin using anti-CD147/Emmprin antibody (AAA11678).CD147/Emmprin was detected in paraffin-embedded section of human intetsinal cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-CD147/Emmprin Antibody (AAA11678) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



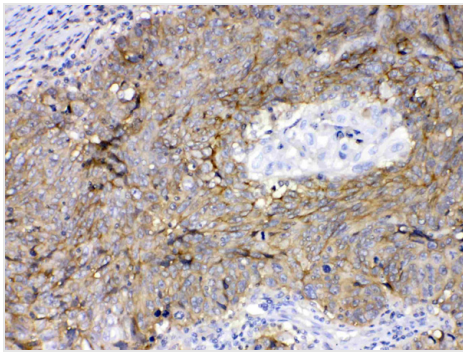
FCM (Flow Cytometry)

Figure 5. Flow Cytometry analysis of A549 cells using anti-CD147/Emmprin antibody (AAA11678).Overlay histogram showing A549 cells stained with AAA11678 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CD147/Emmprin Antibody (AAA11678,1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight 488 conjugated goat anti-rabbit IgG (5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



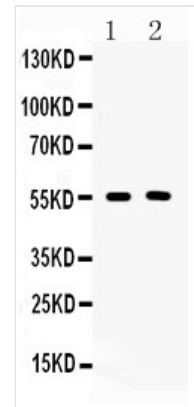
IHC (Immunohistochemistry)

Figure 3. IHC analysis of CD147/Emmprin using anti-CD147/Emmprin antibody (AAA11678).CD147/Emmprin was detected in paraffin-embedded section of human tonsil tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-CD147/Emmprin Antibody (AAA11678) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of CD147/Emmprin using anti-CD147/Emmprin antibody (AAA11678). CD147/Emmprin was detected in paraffin-embedded section of human lung cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-CD147/Emmprin Antibody (AAA11678) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of CD147/Emmprin using anti-CD147/Emmprin antibody (AAA11678). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human placenta tissue lysates, Lane 2: JURKAT whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CD147/Emmprin antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CD147/Emmprin at approximately 55KD. The expected band size for CD147/Emmprin is at 42KD.

ADDITIONAL INFORMATION

Related Product Information for anti-BSG antibody	Rabbit IgG polyclonal antibody for Basigin(BSG) detection. Background: 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.
References	- Guo, H., Majmudar, G., Jensen, T. C., Biswas, C., Toole, B. P., Gordon, M. K. Characterization of the gene for human EMMPRIN, a tumor cell surface inducer of matrix metalloproteinases. <i>Gene</i> 220: 99-108, 1998. - Zhou, S., Zhou, H., Walian, P. J., Jap, B. K. CD147 is a regulatory subunit of the gamma-secretase complex in Alzheimer's disease amyloid beta-peptide production.

NCBI AND UNIPROT INFORMATION

NCBI GI #	1016080631
NCBI GeneID	682
NCBI Accession #	NP_001309172.1
NCBI GenBank Nucleotide #	NM_001322243.1
UniProt Accession #	P35613; Q7Z796; Q8IZL7; A6NJW1; D3YLG5
Molecular Weight	22,764 Da
NCBI Official Full Name	basigin isoform 2
NCBI Official Synonym Full Names	basigin (Ok blood group)

NCBI Official Symbol	BSG
NCBI Official Synonym Symbols	OK; 5F7; TCSF; CD147; EMMPRIN
NCBI Protein Information	basigin
UniProt Protein Name	Basigin
UniProt Gene Name	BSG
UniProt Synonym Gene Names	EMMPRIN; TCSF

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/cd147-emmprin-antibody-western-blot-immunohistochemistry-elisa/11678>