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Anti-CD147/BSG Antibody

Catalog Number: PA1526

About BSG

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 BSG gene contains 8 exons and spans 10.8 kb. The human BSG gene is mapped to 19p13.3. This protein is a determinant for the Ok blood group system. Emmprin has been shown to be an essential receptor on red blood cells for the malaria parasite. Emmprin 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 play fundamental roles in intercellular recognition involved in various immunologic phenomena, differentiation, and development, Emmprin is though also to play a role in intercellular recognition. Emmprin also regulates several distinct functions, such as spermatogenesis, expression of the monocarboxylate transporter and the responsiveness of lymphocytes. Emmprin 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.

Overview

Product Name	Anti-CD147/BSG Antibody
Reactive Species	Human
Description	Boster Bio Anti-CD147/BSG Antibody catalog # PA1526. Tested in IHC, WB applications. This antibody reacts with Human.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2mg Na2HPO4.
Storage Instructions	Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P35613

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human CD147.
Predicted Reactive Species	Bovine
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG

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Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.1-0.5ug/ml, Human Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human

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Anti-CD147/BSG Antibody (PA1526) Images

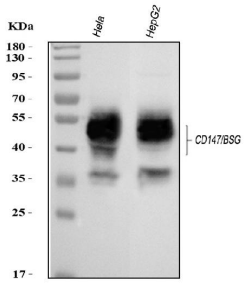


Figure 1. Western blot analysis of CD147/BSG using anti-CD147/BSG antibody (PA1526).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human Hela whole cell lysates,
Lane 2: human HepG2 whole cell lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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/BSG antigen affinity purified polyclonal antibody (Catalog # PA1526) at 0.5 ug/mL overnight at 4°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 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for CD147/BSG at approximately 35-60 kDa. The expected band size for CD147/BSG is at 42 kDa.

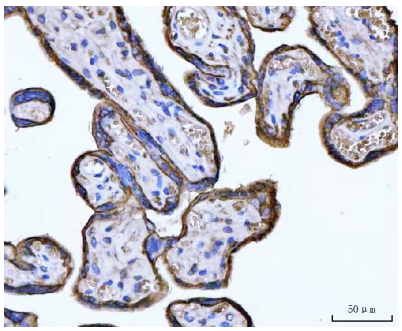


Figure 2. IHC analysis of CD147/BSG using anti-CD147/BSG antibody (PA1526).
CD147/BSG was detected in a paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-CD147/BSG Antibody (PA1526) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

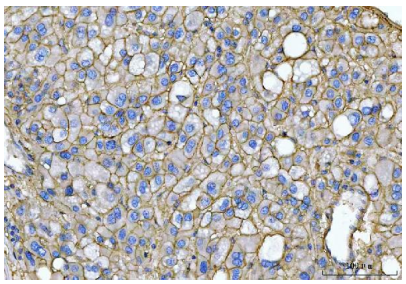
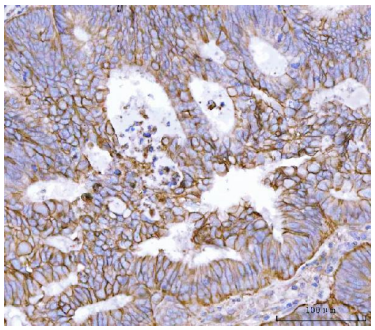


Figure 3. IHC analysis of CD147/BSG using anti-CD147/BSG antibody (PA1526).
CD147/BSG was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-CD147/BSG Antibody (PA1526) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

Figure 4. IHC analysis of CD147/BSG using anti-CD147/BSG

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antibody (PA1526).
CD147/BSG was detected in a paraffin-embedded section of human endometrial carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-CD147/BSG Antibody (PA1526) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

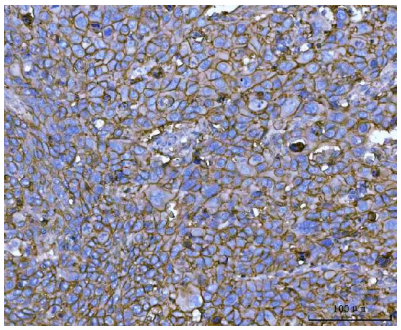


Figure 5. IHC analysis of CD147/BSG using anti-CD147/BSG antibody (PA1526).
CD147/BSG was detected in a paraffin-embedded section of human ovarian serous adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-CD147/BSG Antibody (PA1526) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

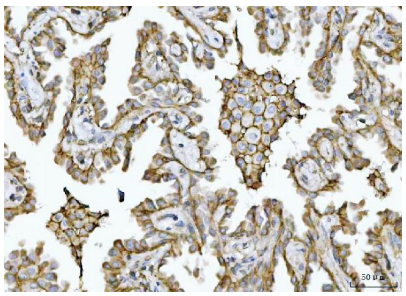


Figure 6. IHC analysis of CD147/BSG using anti-CD147/BSG antibody (PA1526).
CD147/BSG was detected in a paraffin-embedded section of human lung adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-CD147/BSG Antibody (PA1526) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

4 Publications Citing This Product

1. PubMed ID: 23123425, Ying Hz, Liu Yh, Yu B, Wang Zy, Zang Jn, Yu Ch. Food Chem Toxicol. 2013 Feb;52:53-60. Doi: 10.1016/J.Fct.2012.10.030. Epub 2012 Nov 2. Dietary Quercetin Ameliorates Nonalcoholic Steatohepatitis Induced By A High-Fat Diet In Gerbils.

2. PubMed ID: 28927140, iTRAQ-coupled 2D LC/MS-MS analysis of CXCR7-transfected papillary thyroid carcinoma cells: A new insight into CXCR7 regulation of papillary thyroid carcinoma progression and identification of potential biomarkers

3. PubMed ID: 28962206, Overexpression of CD147 is associated with poor prognosis, tumor cell migration and ERK signaling pathway activation in hepatocellular carcinoma

Visit bosterbio.com/anti-cd147-antibody-pa1526-boster.html to see all 4 publications.

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