Mouse CD147 / EMMPRIN / Basigin Protein (His Tag)

Catalog Number: **50332-M08H**

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Biological Solution Specialist

General Information

Gene Name Synonym:

AI115436; AI325119; CD147; EMMPRIN; HT-7

Protein Construction:

A DNA sequence encoding the extracellular domain of mouse BSG isoform 2 (NP_001070652.1) (Met 1-Arg 209) was expressed, fused with a polyhistidine tag at the C-terminus.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Ala 22

Molecular Mass:

The secreted recombinant mouse BSG comprises 199 amino acids and has a predicted molecular mass of 30 kDa. As a result of glycosylation, the apparent molecular mass of rm BSG is approximately 30-35 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

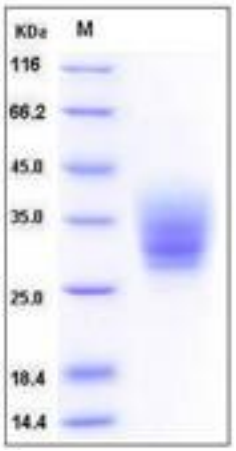
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

CD147/EMMPRIN (Extracellular Matrix Metalloproteinase Inducer), also known as Basigin (BSG), is a transmembrane glycoprotein with different forms resulted from different modes of glycosylation and N-terminal sequence variants. It is a member of the immunoglobulin superfamily with homology to both the immunoglobulin V domain and MHC class II antigen beta-chain. This protein play important roles in variety of events including spermatogenesis, embryo implantation, neural network formation. CD147 induces the production and release of matrix metalloproteinases (MMP) in the surrounding mesenchymal cells and tumor cells, and thereby promotes invasion, metastasis, growth and survival of malignant cells. Furthermore, CD147 also serves as a receptor for extracellular cyclophilinthe and its association with integrins might be important in signal transduction. Recently, CD147 displays increased expression in many cancers, and it has been previously demonstrated to participate in cancer metastasis and progression. Thus, CD147 and its antibody are used as an effective treatment for malignant cancers.

References

1.Tang Y, *et al.* (2004) Tumor-stroma interaction: positive feedback regulation of extracellular matrix metalloproteinase inducer (EMMPRIN) expression and matrix metalloproteinase-dependent generation of soluble EMMPRIN. Mol Cancer Res. 2(2): 73-80. 2.Wilson MC, *et al.* (2005) Basigin (CD147) is the target for organomercurial inhibition of monocarboxylate transporter isoforms 1 and 4: the ancillary protein for the insensitive MCT2 is EMBIGIN (gp70). J Biol Chem. 280(29): 27213-21. 3.Curtin KD, *et al.* (2005) Basigin (EMMPRIN/CD147) interacts with integrin to affect cellular architecture. J Cell Sci. 118(Pt 12): 2649-60.