Biotinylated Human EMMPRIN / CD147 Protein, Avitag™,His Tag (MALS verified)

Catalog # CD7-H82E0

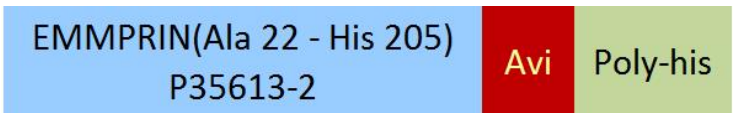
Synonym

Basigin,BSG,5F7,CD147,EMMPRIN,M6,OK,TCSF

Source

Biotinylated Human EMMPRIN, Avitag,His Tag(CD7-H82E0) is expressed from human 293 cells (HEK293). It contains AA Ala 22 - His 205 (Accession # P35613-2).
Predicted N-terminus: Ala 22

Molecular Characterization



This protein carries an Avi tag (Avitag™) at the C-terminus, followed by a polyhistidine tag.

The protein has a calculated MW of 22.75 kDa. The protein migrates as 30-45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Purity

>92% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

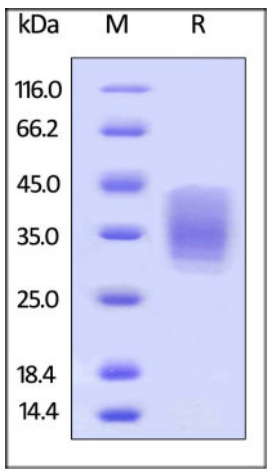
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

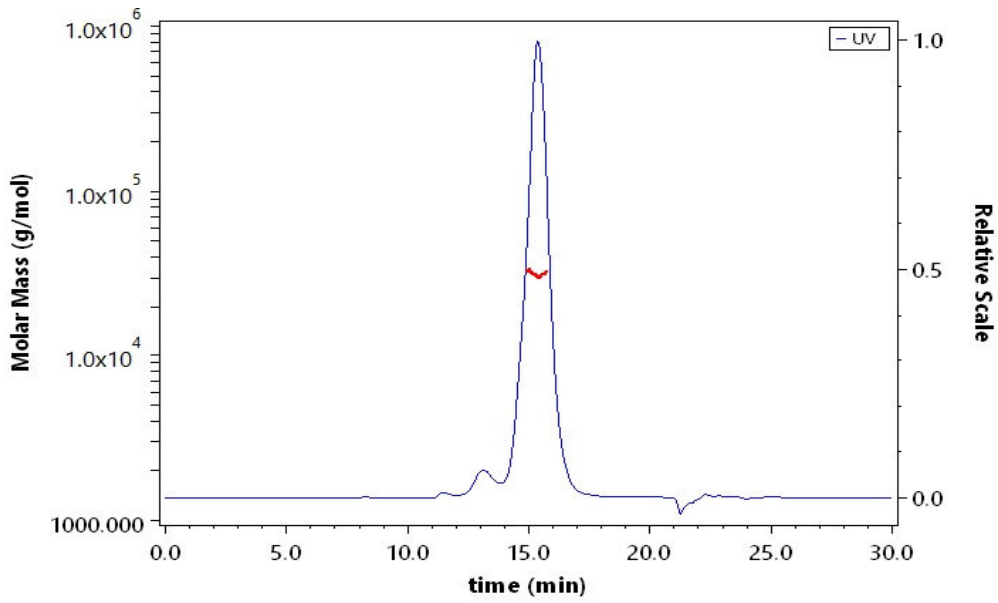
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



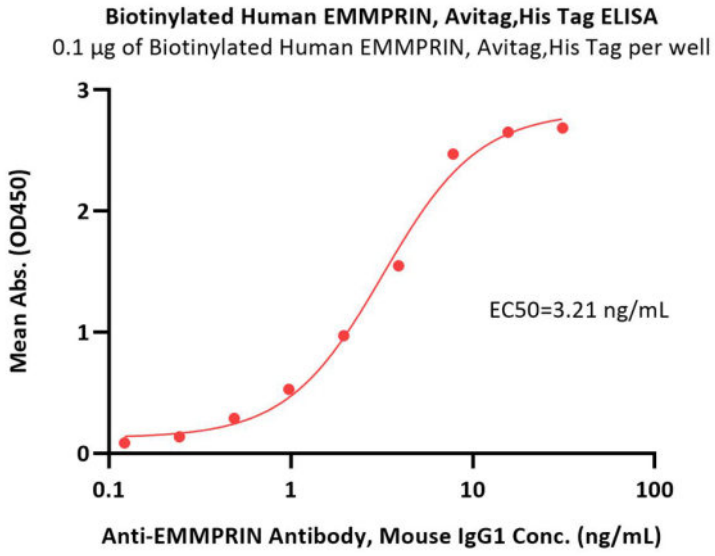
Biotinylated Human EMMPRIN, Avitag,His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 92%.

SEC-MALS

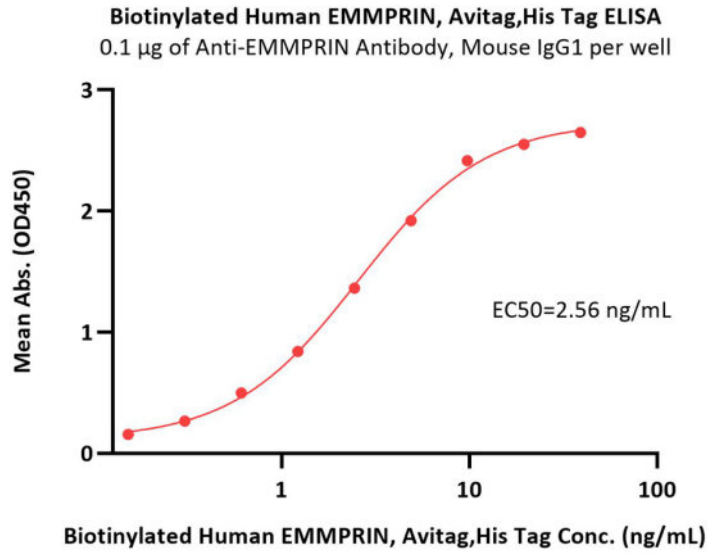


The purity of Biotinylated Human EMMPRIN, Avitag,His Tag (Cat. No. CD7-H82E0) is more than 90% and the molecular weight of this protein is around 25-35 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Biotinylated Human EMMPRIN, Avitag,His Tag (Cat. No. CD7-H82E0) at 1 μg/mL (100 μL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate can bind Anti-EMMPRIN Antibody, Mouse IgG1 with a linear range of 0.1-4 ng/mL (QC tested).



Immobilized Anti-EMMPRIN Antibody, Mouse IgG1 at 1 μg/mL (100 μL/well) can bind Biotinylated Human EMMPRIN, Avitag,His Tag (Cat. No. CD7-H82E0) with a linear range of 0.2-5 ng/mL (Routinely tested).

Background

CD147, also known as Basigin (BSG), or extracellular matrix metalloproteinase inducer (EMMPRIN). The human basigin protein contains 269 amino acids that form two heavily glycosylated C2 type immunoglobulin-like domains at the N-terminal extracellular portion. A second form of basigin has also been characterized that contains one additional immunoglobulin-like domain in its extracellular portion. As members of the immunoglobulin superfamily play fundamental roles in intercellular recognition involved in various immunologic phenomena, differentiation, and development, basigin is thought also to play a role in intercellular recognition and regulate several distinct functions, such as spermatogenesis, expression of the monocarboxylate transporter and the responsiveness of lymphocytes. Basigin is a type I integral membrane receptor that has many ligands, including the cyclophilin (CyP) proteins Cyp-A and CyP-B and certain integrins.