

Synonym

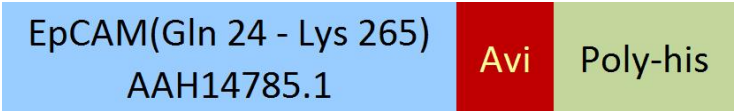
EPCAM,TACSTD1,TROP1,CD326,DIAR5,EGP2,EGP314,EGP40,ESA,GA733-2,HNPCC8,HNPCC-8,KS1,4,KSA,M4S1,MIC18,MK1

Source

Biotinylated Human EpCAM, Avitag,His Tag(EPM-H82E8) is expressed from human 293 cells (HEK293). It contains AA Gln 24 - Lys 265 (Accession # [AAH14785.1](#)).

Predicted N-terminus: Gln 24

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 30.0 kDa. The protein migrates as 34-45 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.

Endotoxin

Less than 0.1 EU per µg by the LAL method / rFC method.

Purity

>95% 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

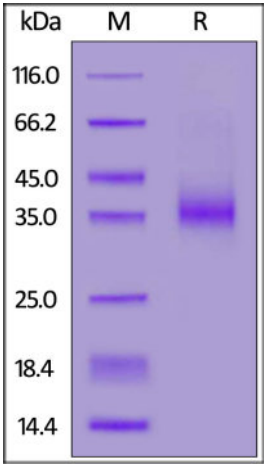
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

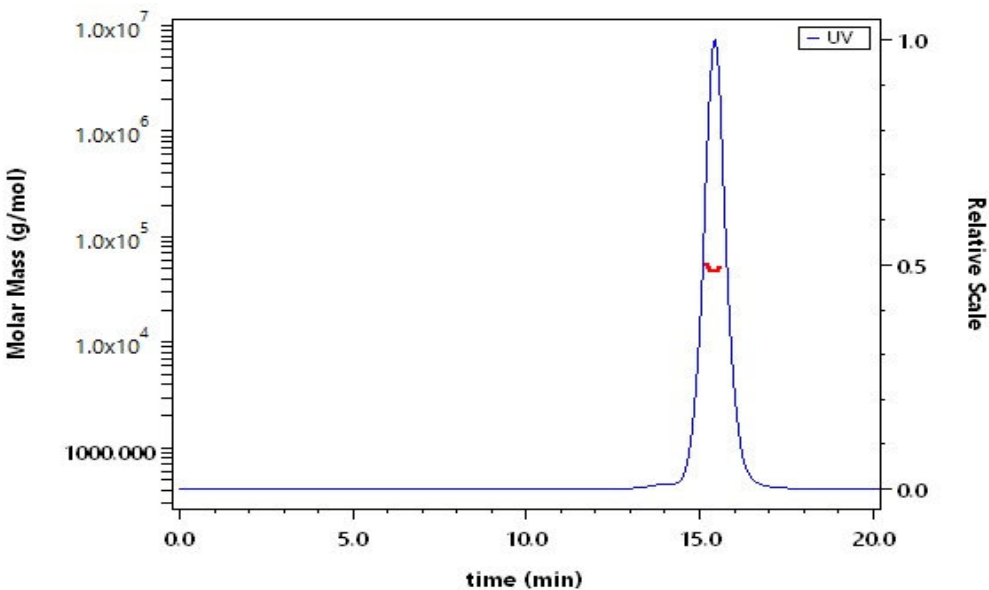
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Human EpCAM, 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 95%.

SEC-MALS

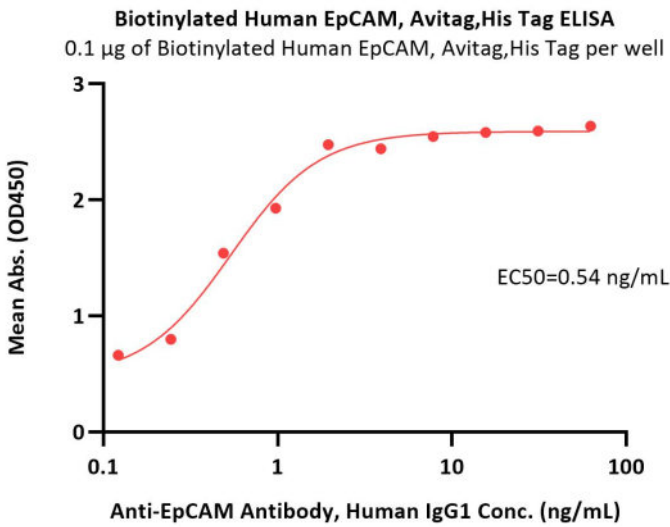


The purity of Biotinylated Human EpCAM, Avitag,His Tag (Cat. No. EPM-H82E8) is more than 90% and the molecular weight of this protein is around 32-50 kDa verified by SEC-MALS.

[Report](#)



Bioactivity-ELISA



Immobilized Biotinylated Human EpCAM, Avitag,His Tag (Cat. No. EPM-H82E8) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind Anti-EpCAM Antibody, Human IgG1 with a linear range of 0.1-2 ng/mL (QC tested).

Background

EpCAM is also known as CO171A, EGP, EGP40,GA7332, KSA, M4S, MIC18, MK1, TROP1, hEGP2, and is a pan-epithelial differentiation antigen that is expressed on almost all carcinomas as 17-1A(mAb) antigen. Its constitutional function is being elucidated. It is intricately linked with the Cadherin-Catenin pathway and hence the fundamental WNT pathway responsible for intracellular signaling and polarity. The epithelial cell adhesion molecule (Ep-CAM) is known to express in most epithelial malignancies and was reported as a tumor marker or a candidate of molecular targeting therapy. Ep-CAM cross signaling with N-cadherin involves Pi3K, resulting in the abrogation of the cadherin adhesion complexes in epithelial cells was reported. And Epithelial cell adhesion molecule (Ep-CAM) recently received increased attention as a prognostic factor in breast cancer.

