Catalog # EPM-H82E8



#### 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 # <u>AAH14785.1</u>).

Predicted N-terminus: Gln 24

## **Molecular Characterization**

EpCAM(Gln 24 - Lys 265) AAH14785.1



/i Poly-his

This protein carries an Avi tag (Avitag<sup>TM</sup>) 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<sup>™</sup> 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  $\mu$ g by the LAL method.

## Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### Formulation

Lyophilized from 0.22  $\mu$ m 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

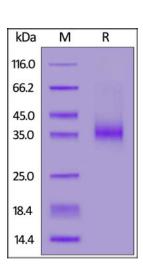
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

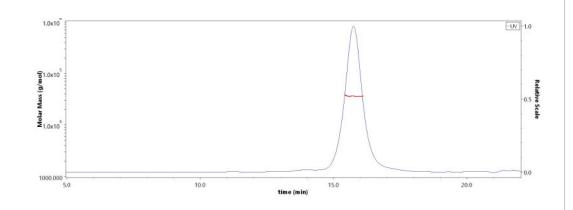
This product is stable after storage at:

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

# **SDS-PAGE**



# SEC-MALS



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%.

**Bioactivity-ELISA** 

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

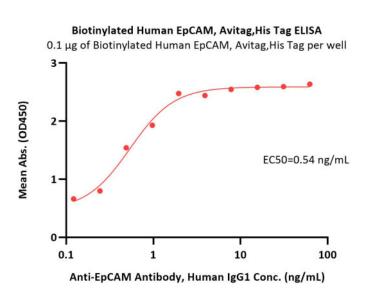


>>> www.acrobiosystems.com





#### Catalog # EPM-H82E8



Immobilized Biotinylated Human EpCAM, Avitag,His Tag (Cat. No. EPM-H82E8) at 1  $\mu$ g/mL (100  $\mu$ L/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5  $\mu$ g/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.

# **Clinical and Translational Updates**



>>> www.acrobiosystems.com

