

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 Protein, Fc Tag, primary amine labeling (EPM-H8254) is expressed from human HEK293 cells. It contains AA Gln 24 - Lys 265 (Accession # [AAH14785.1](#)). It is the biotinylated form of Human EpCAM protein, Fc Tag (Cat # EPM-H5254).

Predicted N-terminus: Gln 24

Molecular Characterization

EpCAM(Gln 24 - Lys 265) AAH14785.1	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus

The protein has a calculated MW of 53.5 kDa. The protein migrates as 60-65 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with biotins using standard chemical labeling method. A standard biotin reagent (13.5 angstroms) is used in this product.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

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.

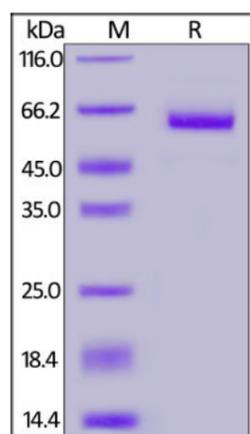
Storage

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 Protein, Fc Tag, primary amine labeling on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

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

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.