

Synonym

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

Source

FITC-Labeled Human EpCAM, Fc Tag (EPM-HF255) is expressed from human 293 cells (HEK293). It contains AA Gln 24 - Lys 265 (Accession # AAH14785.1).

Predicted N-terminus: Gln 24

Molecular Characterization

EpCAM(Gln 24 - Lys 265) Fc(Pro 100 - Lys 330)
AAH14785.1 P01857

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.

Conjugate

FITC

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 535 nm

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with FITC using standard chemical labeling method. The residual FITC is removed by molecular seive treatment during purification process.

FITC:Protein Ratio

The FITC to protein molar ratio is 1.5-3.5.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from $0.22~\mu m$ filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

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

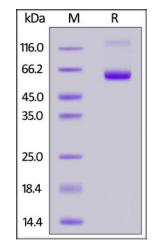
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please protect from light and 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



FITC-Labeled Human EpCAM, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of

FITC-Labeled Human EpCAM / TROP1 Protein, Fc Tag

Catalog # EPM-HF255



the protein is greater than 90%.

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.

References

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