



### 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) AAH14785.1	Fc(Pro 100 - Lys 330) 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 sieve treatment during purification process.*

### 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 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 protect from light and avoid repeated freeze-thaw cycles.*

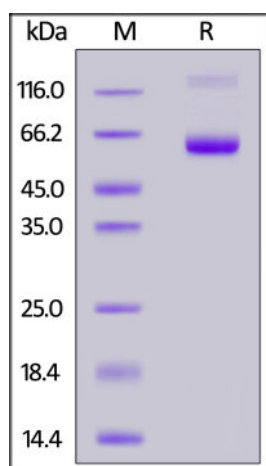
This product is stable after storage at:

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

### SDS-PAGE

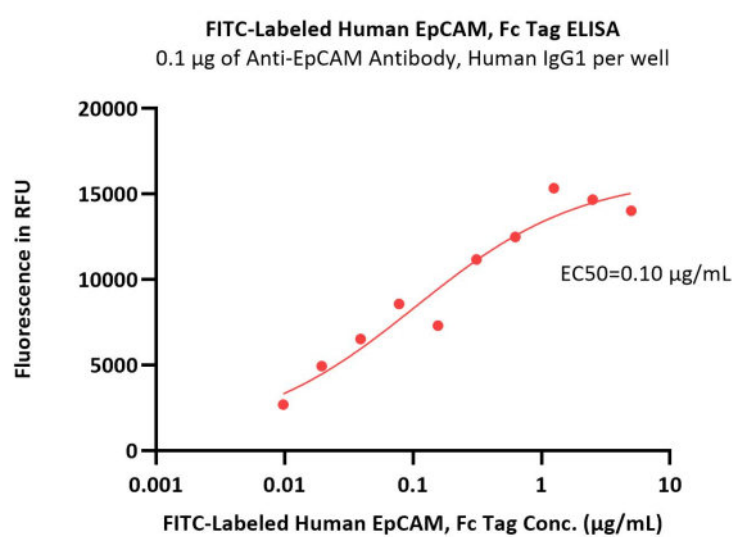
Discounts, Gifts,  
and more!





FITC-Labeled Human EpCAM, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

**Bioactivity-ELISA**



Immobilized Anti-EpCAM Antibody, Human IgG1 at 1 µg/mL (100 µL/well) can bind FITC-Labeled Human EpCAM, Fc Tag (Cat. No. EPM-HF255) with a linear range of 0.01-1.25 µg/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**

