# Biotinylated Rhesus macaque EpCAM / TROP1 Protein, His,Avitag™ (MALS verified)

Catalog # EPM-R82E3



### **Synonym**

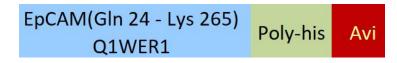
EPCAM,TACSTD1,TROP1,CD326,DIAR5,EGP2,EGP314,EGP40,ESA,GA733 -2,HNPCC8,HNPCC-8,KS1,4,KSA,M4S1,MIC18,MK1

### Source

Biotinylated Rhesus macaque EpCAM / TROP1 Protein, His, Avitag(EPM-R82E3) is expressed from human 293 cells (HEK293). It contains AA Gln 24 - Lys 265 (Accession # Q1WER1).

Predicted N-terminus: Gln 24

### **Molecular Characterization**



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag<sup>TM</sup>).

The protein has a calculated MW of 31 kDa. The protein migrates as 37-45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Labeling

Biotinylation of this product is performed using Avitag<sup>TM</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 1.0 EU per µg by the LAL method.

# **Purity**

>90% 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**

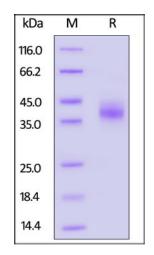
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

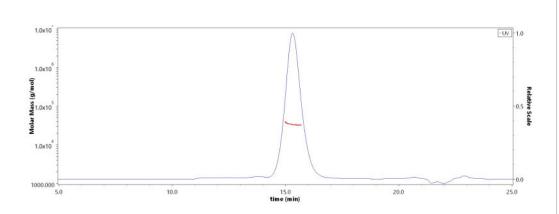
### **SDS-PAGE**



Biotinylated Rhesus macaque EpCAM / TROP1 Protein, His, Avitag 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**

### SEC-MALS



The purity of Biotinylated Rhesus macaque EpCAM / TROP1 Protein, His, Avitag (Cat. No. EPM-R82E3) is more than 90% and the molecular weight of this protein is around 28-40 kDa verified by SEC-MALS.

Report

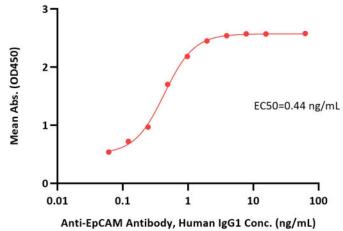


# Biotinylated Rhesus macaque EpCAM / TROP1 Protein, His,Avitag™ (MALS verified)





Biotinylated Rhesus macaque EpCAM / TROP1 Protein, His,Avitag ELISA 0.1  $\mu g$  of Biotinylated Rhesus macaque EpCAM / TROP1 Protein, His,Avitag per well



Immobilized Biotinylated Rhesus macaque EpCAM / TROP1 Protein, His,Avitag (Cat. No. EPM-R82E3) 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 0.06-1  $\mu$ g/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**

