



## EpCAM Recombinant Protein

CATALOG NUMBER: 91-314

### Specifications

<b>SPECIES:</b>	Human
<b>SOURCE SPECIES:</b>	Human Cells
<b>SEQUENCE:</b>	Gln24-Lys265
<b>FUSION TAG:</b>	C-6 His tag
<b>APPLICATIONS:</b>	This recombinant protein can be used for biological assays. For research use only.

### Properties

<b>PURITY:</b>	Greater than 95% as determined by reducing SDS-PAGE. Endotoxin level less than 0.1 ng/ug (1 IEU/ug) as determined by LAL test.
<b>PREDICTED MOLECULAR WEIGHT:</b>	28.43 kD
<b>PHYSICAL STATE:</b>	Lyophilized
<b>BUFFER:</b>	Lyophilized from a 0.2 um filtered solution of 20mM PB, 150mM NaCl, pH 7.2. It is not recommended to reconstitute to a concentration less than 100 ug/ml. Dissolve the lyophilized protein in ddH <sub>2</sub> O.
<b>STORAGE CONDITIONS:</b>	Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.

### Additional Info

<b>ALTERNATE NAMES:</b>	Epithelial Cell Adhesion Molecule, Ep-CAM, Adenocarcinoma-Associated Antigen, Cell Surface Glycoprotein Trop-1, Epithelial Cell Surface Antigen, Epithelial Glycoprotein, EGP, Epithelial Glycoprotein 314, EGP314, hEGP314, KS 1/4 Antigen, KSA, Major Gastrointestinal Tumor-Associated Protein GA733-2, Tumor-Associated Calcium Signal Transducer 1, CD326, EPCAM, GA733-2, M1S2, M4S1, MIC18, TACSTD1, TROP1
<b>ACCESSION NO.:</b>	P16422

### Background

Epithelial Cell Adhesion Molecule (EpCAM) is a signal type I transmembrane glycoprotein that belongs to the EPCAM family. EpCAM is composed of an extracellular domain with one thyroglobulin type-1 domain, a transmembrane domain and a cytoplasmic domain. EpCAM is found on the surface of adenocarcinoma, but not on mesodermal or neural cell membranes. The EpCAM molecule has been shown to function as a homophilic Ca<sup>2+</sup> independent adhesion molecule. It may act as a physical homophilic interaction molecule between intestinal epithelial cells (IECs) and intraepithelial lymphocytes (IELs) at the mucosal epithelium as an immunological barrier providing the first line of defense against infection. Defects in EPCAM are a cause of hereditary non-polyposis colorectal cancer type 8 (HNPCC8) and diarrhea type 5 (DIAR5). EpCAM plays a role in embryonic stem cells proliferation and differentiation; it up-regulates the expression of FABP5, MYC and Cyclin A and Cyclin E. It is highly and selectively expressed by undifferentiated embryonic stem cells.

**FOR RESEARCH USE ONLY**