

Recombinant Human EpCAM/TROP-1 Protein (His & Avi Tag)

Catalog Number: PKSH033801

Note: Centrifuge before opening to ensure complete recovery of vial contents.

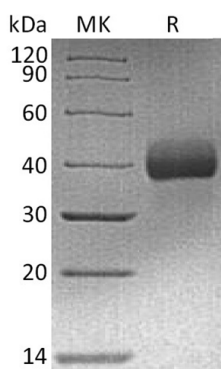
Description

Species	Human
Source	HEK293 Cells-derived Human EpCAM;TROP-1 protein Gln24-Lys265, with an C-terminal His & Avi
Calculated MW	30.2 kDa
Observed MW	35-50 kDa
Accession	AAH14785.1
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Reconstitution	Please refer to the specific buffer information in the printed manual.

Data



> 95 % as determined by reducing SDS-PAGE.

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^{2+} 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.