

# EpCAM/Trop1

Catalog # PVGS1639

### Specification

## EpCAM/Trop1 - Product Information

Primary Accession **Species** Human <u>P16422</u>

Sequence Gln24-Lys245

Purity > 95% as analyzed by SDS-PAGE<br>> 95% as analyzed by HPLC

**Endotoxin Level**  $\leq$  1 EU/ µg of protein by LAL method

**Biological Activity** 

Immobilized Human EpCAM at 0.2  $\mu$ g/ml (100  $\mu$ l/Well). Dose response curve for Anti-Trop1 Ab with the EC<sub>50</sub> of 8.7 ng/ml determined by ELISA.

Expression System Expi293

Formulation

Lyophilized from a 0.22 µm filtered solution in PBS, pH 7.4. Normally 5 % trehalose is added as protectant before lyophilization.

### Reconstitution

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in distilled water up to  $100 \mu g/ml$ .

### Storage & Stability

Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Avoid repeated freeze-thaw cycles.

### **EpCAM/Trop1 - Additional Information**

Gene ID 4072

**Other Names** 

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

Target Background



Epithelial Cellular Adhesion Molecule (EpCAM), also known as KS1/4, gp40, GA733-2, 17-1A, and TROP-1, is a 40 kDa transmembrane glycoprotein that consists of a 242 amino acid (aa) extracellular domain with two EGF-like repeats, a 23 aa transmembrane segment, and a 26 aa cytoplasmic domain.

### **EpCAM/Trop1 - Protein Information**

#### Name EPCAM

Synonyms GA733-2, M1S2, M4S1, MIC18, TACSTD1, TRO

#### Function

May act as a physical homophilic interaction molecule between intestinal epithelial cells (IECs) and intraepithelial lymphocytes (IELs) at the mucosal epithelium for providing immunological barrier as a first line of defense against mucosal infection. Plays a role in embryonic stem cells proliferation and differentiation. Up-regulates the expression of FABP5, MYC and cyclins A and E.

#### **Cellular Location**

Lateral cell membrane; Single-pass type I membrane protein. Cell junction, tight junction. Note=Colocalizes with CLDN7 at the lateral cell membrane and tight junction

#### **Tissue Location**

Highly and selectively expressed by undifferentiated rather than differentiated embryonic stem cells (ESC) Levels rapidly diminish as soon as ESC's differentiate (at protein levels). Expressed in almost all epithelial cell membranes but not on mesodermal or neural cell membranes. Found on the surface of adenocarcinoma.

#### **EpCAM/Trop1 - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

EpCAM/Trop1 - Images