



Recombinant Protein Technical Manual

Recombinant Human EpCAM/TROP Protein (His Tag)(Active)
RPES2300

Product Data:

Product SKU: RPES2300

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_002345.1

Protein Information:

Molecular Mass: 29 kDa

AP Molecular Mass: 36 kDa

Tag: C-His

Bio-activity: Measured by the ability of the immobilized protein to support the adhesion of NIH-3T3 mouse embryonic fibroblast cells. When cells are added to EpCAM-His coated plates (1.25µg/mL, 100µL/well), approximately >40% will adhere specifically after 30 minutes at 37°C.

Purity: > 96 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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 sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: DIAR5;EGP-2;EGP314;EGP40;ESA;HNPC8;KS1/4;KSA;M4S1;MIC18;MK;TACSTD1;TROP;TROP1

Immunogen Information:

Sequence: Met 1-Lys265

Background:

Epithelial Cell Adhesion Molecule (EpCAM), also known as GA733-2 antigen, is a type I transmembrane glycoprotein composed of an extracellular domain with two EGF-Like repeats and a cysteine-rich region, a transmembrane domain and a cytoplasmic domain. It modulates cell adhesion and proliferation. Its overexpression has been detected in many epithelial tumours and has been associated with high stage, high grade and a worse survival in some tumour types. EpCAM has been shown to function as a calcium-independent homophilic cell adhesion molecule that does not exhibit any obvious relationship to the four known cell adhesion molecule superfamilies. However, recent insights have revealed that EpCAM participates in not only cell adhesion, but also in proliferation, migration and differentiation of cells. In addition, recent study revealed that EpCAM is the Wnt-beta-catenin signaling target gene and may be used to facilitate prognosis. It has oncogenic potential and is activated by release of its intracellular domain, which can signal into the cell nucleus by engagement of elements of the wnt pathway.