



# Recombinant Protein Technical Manual

## Recombinant Human CDCP1/CD318 Protein (aa 1-343, His Tag)

RPES0404

### Product Data:

**Product SKU:** RPES0404

**Size:** 20µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** Q9H5V8-3

### Protein Information:

**Molecular Mass:** 36.4 kDa

**AP Molecular Mass:**

**Tag:** C-His

**Bio-activity:**

**Purity:** > 90 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg of the protein 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:** CUB domain-containing protein 1;Membrane glycoprotein gp140;Subtractive immunization M plus HEp3-associated 135 kDa protein;SIMA135;Transmembrane and associated with src kinases;CD318;TRASK

## Immunogen Information:

**Sequence:** Met 1-Glu343

## Background:

CDCP1 contains three extracellular CUB domains. It is a putative stem cell marker that is highly expressed in some human cancer cells and in both, typical and atypical (cancerous) colons. It interacts with CDH2/N-cadherin, CDH3/P-cadherin, SDC1/syndecan, SDC4/syndecan-4 and the serine protease ST14/MT-SP1. It also interacts with SRC and PRKCG/protein kinase C gamma. CDCP1 is taken as a key regulator of EGF/EGFR-induced cell migration. It has been shown that signaling via EGF/EGFR induces migration of ovarian cancer Caov3 and OVCA420 cells with concomitant up-regulation of CDCP1 mRNA and protein. Consistent with a role in cell migration CDCP1 relocates from cell-cell junctions to punctate structures on filopodia after activation of EGFR. It may be involved in cell adhesion and cell matrix association. It also may play a role in the regulation of anchorage versus migration or proliferation versus differentiation via its phosphorylation. It has been taken as a novel marker for leukemia diagnosis and for immature hematopoietic stem cell subsets.