

# Human CDCP1 / CD318 Protein (Fc Tag)

Catalog Number: 13262-H05H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

CD318; SIMA135; TRASK

### Protein Construction:

A DNA sequence encoding the human CDCP1 (Q9H5V8-3) (Met1-Glu343) was fused with Fc region of mouse IgG at the C-terminus.

**Source:** Human

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** ≥ 90 % as determined by SDS-PAGE. ≥ 90 % as determined by SEC-HPLC.

### Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Phe 30

### Molecular Mass:

The recombinant human CDCP1/mFc is a disulfide-linked homodimer. The reduced monomer comprises 548 amino acids and has a predicted molecular mass of 61.4 kDa. The apparent molecular mass of the protein is approximately 89-93 in SDS-PAGE under reducing conditions due to glycosylation.

### Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

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-1, 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.

## References

1. Conze T, *et al.* (2003) CDCP1 is a novel marker for hematopoietic stem cells. *Ann N Y Acad Sci.* 996 (1): 222-6. 2. Hooper JD, *et al.* (2003) Subtractive immunization using highly metastatic human tumor cells identifies SIMA135/CDCP1, a 135 kDa cell surface phosphorylated glycoprotein antigen. *Oncogene.* 22(12): 1783-94. 3. Scherl-Mostageer M, *et al.* (2001) Identification of a novel gene, CDCP1, overexpressed in human colorectal cancer. *Oncogene.* 20(32):4402-8.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

For US Customer: Fax: 267-657-0217 • Tel: 215-583-7898

Global Customer: Fax :+86-10-5862-8288 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>