

## CUB domain-containing protein 1 (CDCP1), human, Recombinant (His Tag)

<b>Origin:</b>	Recombinant
<b>Source:</b>	CHO
<b>Species:</b>	Human
<b>Tag:</b>	His at C-terminus
<b>Cat No.</b>	41901
<b>Size:</b>	0.1 mg
<b>Purity:</b>	>95% as determined by SDS-PAGE
<b>Endotoxin:</b>	<5 EU/mg, determined by the LAL method

### Background information

CUB domain-containing protein 1 (CDCP1) is a protein that in humans is encoded by the CDCP1 gene. CDCP1 is a 140 kD transmembrane glycoprotein with a large extracellular domain (ECD) containing two CUB domains, and a smaller intracellular domain (ICD).

The phosphorylation of CDCP1 is seen in many cancers, it is a putative stem cell marker, and is reported as a key regulator of EGF/EGFR-induced cell migration. It also interacts with cell-cell adhesion glycoproteins including CDH3/P-cadherin, CDH2/N-cadherin, membrane proteins including, SDC1/syndecan-1, SDC4/syndecan-4, and integral membrane serine protease ST14/MT-SP1. Its phosphorylation may also play a role in the regulation of anchorage versus migration and proliferation versus differentiation.

### Product information

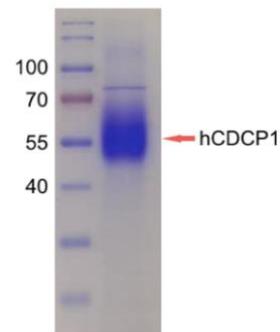
A DNA sequence encoding the human CDCP1 (Met1-Ser367) was expressed with a polyhistidine tag at the C-terminus (Uniprot No. Q9H5V8-3). Its predicted molecular mass of 39.1 kDa. The concentration of protein was determined by BCA.

### Amino Acid Sequence

MAGLNCGVSIALLGVLLLGAARLPRGAEA  
FEIALPRESNITVLIKLGTPDLLAKPCYIVIS  
KRHITMLSIKSGERIVFTFSCQSPENHFVIEI  
QKNIDCMMSGPCPFGEVQLQPSTSLPPLNR  
TFIWDVKAHKSIGLELQFSIPRLRQIGPGES  
CPDGVTHSISGRIDATVVRIGTFCSNGTVSR  
IKMQEGVKMALHLPWFHPRNVSGFSIANR

SSIKRLCIIESVFEGEGSATLMSANYPEGFP  
EDELMTWQFVVPAPHLRASVSFLNFNLSNC  
ERKEERVEYYIPGSTTNPEVFKLEDKQPGN  
MAGNFNLSLQGCDAQSPGILRLQFQVL  
VQHPQNESNKIYVVDLSNERAMSLTIEPRP  
VKQSHHHHHHHHHH

### SDS-PAGE gel



### Formulation, Reconstitution and Storage

Lyophilized from sterile PBS, pH 7.4. Lyophilized protein can be stored at 2°C to 8°C for short-term, and at -20°C to -80°C for long term store. For reconstitution, add 100 µl of deionized water, mix gently and incubate the reconstituted product for 10 minutes at room temperature prior to use. Reconstituted protein should be kept at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

### Reference

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. Moroz A, et al (2021) Theragnostic Targeting of CUB Domain Containing Protein 1 (CDCP1) in Pancreatic Cancer. *Clin Cancer Res.* 26(14):3608-3615.