Mouse CDCP1 Protein (His Tag)

Catalog Number: **51110-M08H**

General Information

Gene Name Synonym:

9030022E12Rik; AA409659; E030027H19Rik

Protein Construction:

A DNA sequence encoding the mouse CDCP1 (Q5U462) (Met1-Leu666) was expressed with a C-terminal polyhistidine tag.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 96 % as determined by SDS-PAGE

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 ℃

Predicted N terminal: Ser 30

Molecular Mass:

The recombinant mouse CDCP1 comprises 648 amino acids and has a predicted molecular mass of 73.3 kDa. The apparent molecular mass of the protein is approximately 94-100 kDa 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:

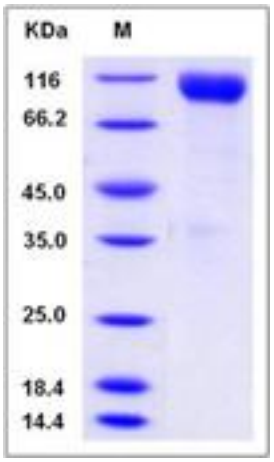
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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.