General Information

Gene Name Synonym:
9030022E12Rik; AA409659; E030027H19Rik

Protein Construction:
A DNA sequence encoding the mouse CDCP1 (QSU462) (Met1-Leu666) was expressed, fused with the Fc region of human IgG1 at the C-terminus.

Source: Mouse
Expression Host: Human Cells

QC Testing
Purity: > 79% 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 °C

Predicted N terminal: Ser 30

Molecular Mass:
The recombinant mouse CDCP1/Fc is a disulfide-linked homodimer. The reduced monomer comprises 878 amino acids and has a predicted molecular mass of 98.8 kDa. The apparent molecular mass of the protein is approximately 117 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°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