

Human CDON / CDO Protein (His Tag)

Catalog Number: 11965-H08H



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

CDO; CDON1; HPE11; ORCAM; Cd0; CDO; Orcam

Protein Construction:

A DNA sequence encoding the human CDON (AAI14436.1) extracellular domain (Met 1-Asp 963) was expressed, with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 65 % 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: Asp 26

Molecular Mass:

The recombinant human CDON consists of 949 amino acids and has a calculated molecular mass of 103 kDa. It migrates as an approximately 125 kDa band in SDS-PAGE under reducing conditions.

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:

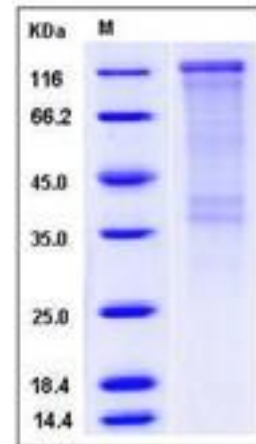
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Cell adhesion molecule-related, down-regulated by oncogenes (CDON), also known as CDO, is an Ig superfamily member, is a component of a cell surface receptor that positively regulates skeletal myogenesis. Brother of CDO (BOC) is a cell surface receptor that derives its name from the structurally related protein, CDON. They are components of a cell surface receptor that positively regulates myogenesis in vitro. Expression of Cdo and Boc in myoblast cell lines is downregulated by the ras oncogene, and forced re-expression of either Cdo or Boc can override ras-induced inhibition of myogenic differentiation. CDO and BOC play a role in the inverse relationship between differentiation and transformation of cells in the skeletal muscle lineage. CDON binds to Bnip-2 and JLP, scaffold proteins for Cdc42 and p38alpha/beta MAPK, respectively. The Bnip-2/Cdc42 and JLP/p38alpha/beta complexes associate in a CDON-dependent manner, resulting in Bnip-2/Cdc42-dependent p38alpha/beta activation and stimulation of cell differentiation. It is proposed that CDO mediates, at least in part, the effects of cell-cell interactions between muscle precursors that are critical in myogenesis.

References

- 1.Kang JS, *et al.* (1998) CDO, a robo-related cell surface protein that mediates myogenic differentiation. *J Cell Biol.* 143(2): 403-13.
- 2.Wegorzewska M, *et al.* (2003) Overexpression of the immunoglobulin superfamily members CDO and BOC enhances differentiation of the human rhabdomyosarcoma cell line RD. *Mol Carcinog.* 37(1): 1-4.
- 3.Cole F, *et al.* (2003) Microform holoprosencephaly in mice that lack the Ig superfamily member Cdon. *Curr Biol.* 13(5): 411-5.

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