# Human CXADR / CAR Protein (His & Fc Tag)

**Catalog Number:** 10799-H03H

Sino Biological
Biological Solution Specialist

## General Information

**Gene Name Synonym:**

CAR; CAR4/6; CXADR; HCAR

**Protein Construction:**

A DNA sequence encoding the human CXADR (NP_001329.1) extracellular domain (Met 1-Gly 237) was fused with the C-terminal polyhistidine-tagged Fc region of human IgG1 at the C-terminus.

**Source:** Human

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 92 % 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:** Leu 20

**Molecular Mass:**

The recombinant human CXADR/Fc is a disulfide-linked homodimer. The reduced monomer consists of 466 amino acids and has a predicted molecular mass of 52 kDa. As a result of glycosylation, the apparent molecular mass of rh CXADR/Fc monomer migrates with an apparent molecular mass of 60-65 kDa 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:**

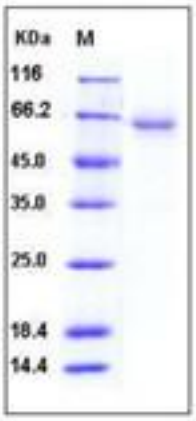
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

**Reconstitution:**

Detailed reconstitution instructions are sent along with the products.

**SDS-PAGE:**




## Protein Description

CXADR (coxsackie virus and adenovirus receptor), also known as CAR, is a type I transmembrane glycoprotein belonging to the CTX family of the Ig superfamily, and is essential for normal cardiac development in the mouse. Proposed as a homophilic cell adhesion molecule, CXADR is a component of the epithelial apical junction complex that is essential for the tight junction integrity, and probably involved in transepithelial migration of polymorphonuclear leukocytes (PMN). Mature mouse CXADR structrually comprises a 218 aa extracellular domain (ECD) with a V-type (D1) and a C2-type (D2) Ig-like domain, a 21 aa transmembrane segment and a 107 aa intracellular domain, among which,D1 is thought to be responsible for homodimer formation in trans within tight junctions. The ECD of mouse CXADR shares 97%, 90% sequence identity with the corresponding regions of rat, human CXADR.

**References**

1.Tomko, R.P. et al., 1997, Proc. Natl. Acad. Sci. U.S.A. 94 (7): 3352–3356. 2.van Raaij , M.J. et al., 2001, Structure. 8 (11): 1147–1155. 3.Cohen, C.J. et al., 2001, J. Biol. Chem. 276 (27): 25392–25398.