# **Mouse CXADR Protein (His Tag)**

Catalog Number: 50019-M08H



# **General Information**

## Gene Name Synonym:

2610206D03Rik; AU016810; AW553441; CAR; MCAR; MCVADR

## **Protein Construction:**

A DNA sequence encoding the mouse CXADR (NP\_001020363.1) extracellular domain (Met 1-Gly 237) was fused with a polyhistidine tag at the C-terminus.

Source: Mouse

Expression Host: HEK293 Cells

**QC** Testing

Purity: > 95 % 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  $\,$   $^{\circ}$ C

Predicted N terminal: Leu 20

## **Molecular Mass:**

The secreted recombinant mouse CXADR consists of 229 amino acids and has a predicted molecular mass of 25.7 kDa. As a result of glycosylation, rmCXADR migrates as an approximately 35 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:

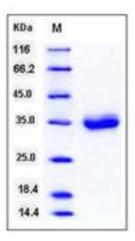
Store it under sterile conditions at  $-20^{\circ}$ C to  $-80^{\circ}$ C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

## Reconstitution:

Detailed reconstitution instructions are sent along with the products.

#### SDS-PAGE:



# **Protein Description**

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.