



# Recombinant Protein Technical Manual

## Recombinant Mouse CXADR/CAR Protein

RPES0135

### Product Data:

**Product SKU:** RPES0135

**Size:** 20µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** NP\_001020363.1

### Protein Information:

**Molecular Mass:** 25 kDa

**AP Molecular Mass:** 30 kDa

**Tag:**

**Bio-activity:**

**Purity:** > 95 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** 2610206D03Rik;AU016810;AW553441;CAR;MCAR;MCVADR

## Immunogen Information:

**Sequence:** Met 1-Gly 237

## Background:

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 structurally 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.