# Recombinant Protein Technical Manual

## Recombinant Mouse CXADR/CAR Protein (Fc Tag)

**RPES1888**

## Product Data:

**Product SKU:** RPES1888

**Size:** 10µg

**Species**: Mouse

**Expression host:** Human Cells

**Uniprot:** P97792

## Protein Information:

**Molecular Mass:** 51 kDa

**AP Molecular Mass:** 50-70 kDa

**Tag:** C-Fc

**Bio-activity:**

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

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

**Storage:** Lyophilized protein should be stored at < -20℃, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

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

**Formulation:** Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

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

**Application:**

**Synonyms:** Coxsackievirus and adenovirus receptor homolog;CAR;Cxadr;CVB3 BP;MCVADR

## Immunogen Information:

**Sequence:** Leu20-Gly237

## Background:

Coxsackievirus and adenovirus receptor homolog （CAR）, also known as CXADR, is a type I transmembrane glycoprotein that belongs to the CTX family of the Ig superfamily. CXADR has monomer subunit that interacts with LNX, BAIAP1, DLG4, PRKCABP, TJP1 and CTNNB1. It also interacts with MPDZ and JAML. CXADR composed of of the epithelial apical junction complex that may function as a homophilic cell adhesion molecule and is essential for tight junction integrity. CXADR also involved in transepithelial migration of leukocytes through adhesive interactions with JAML a transmembrane protein of the plasma membrane of leukocytes. The interaction between both receptors also mediates the activation of gamma-delta T-cells, a subpopulation of T-cells residing in epithelia and involved in tissue homeostasis and repair. Upon epithelial CXADR-binding, JAML induces downstream cell signaling events in gamma-delta T-cells through PI3-kinase and MAP kinases. It results in proliferation and production of cytokines and growth factors by T-cells that in turn stimulate epithelial tissues repair.