

Recombinant Protein Technical Manual

Recombinant Mouse CXADR/CAR Protein (His Tag)(Active) RPES0157

Product Data:

Product SKU: RPES0157 **Size:** 50μg

Species: Mouse Expression host: HEK293 Cells

Uniprot: NP 001020363.1

Protein Information:

Molecular Mass: 25.7 kDa

AP Molecular Mass: 35 kDa

Tag: C-His

Bio-activity: Measured by the ability of the immobilized protein to support the adhesion of

mouse neutrophils. When 5 x 10E4 cells/well are added to CXADR-coated plates (4 μ g/ml and 100 μ l/well), approximately 20%-40% will adhere specifically after 60

minutes at 37°C.

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: $< 1.0 \text{ EU per } \mu \text{g}$ 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: Coxsackievirus and adenovirus receptor homolog;CAR;Cxadr;CVB3 BP;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 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.