

## CXADR/CAR Protein, Human, Recombinant (His & hFc)

### General Information

Synonyms:	CXADR;HCAR;CAR;coxsackie virus and adenovirus receptor;CAR4/6
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. Predicted N terminal: Leu 20
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P78310-1
Molecular Weight:	52 kDa (predicted); 60-65 kDa (reducing condition, due to glycosylation)

### QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 92 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/µg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 µm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

### Preparation and Storage

**Reconstitution:**  
A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

**Stability & Storage:**

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

**Shipping:**

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

### Protein 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 17 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%, 9% sequence identity with the corresponding regions of rat, human CXADR.

### Reference

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