

Recombinant Mouse CXADR/CAR Protein (His Tag)

Catalog No. PKSM040910

Note: Centrifuge before opening to ensure complete recovery of vial contents.

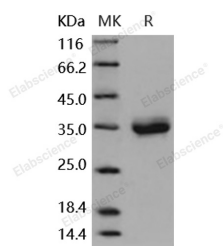
Description

Synonyms	Coxsackievirus and adenovirus receptor homolog;CAR;Cxadr;CVB3 BP;MCVADR
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Met 1-Gly 237
Accession	NP_001020363.1
Calculated Molecular Weight	25.7 kDa
Observed molecular weight	35 kDa
Tag	C-His
Bioactivity	Measured by the ability of the immobilized protein to support the adhesion of mouse neutrophils. When 5×10^4 cells/well are added to CXADR-coated plates (4 µg/ml and 100 µl/well), approximately 20%-40% will adhere specifically after 60 minutes at 37°C.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, 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 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

For Research Use Only

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.