Recombinant Human CXADR/CAR Protein (His Tag)

Catalog Number: PKSH031424

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

Description		
Species	Human	
Source	HEK293 Cells-derived Human CXADR/CAR protein Met 1-Gly 237, with an C-terminal	
	His	
Calculated MW	25.6 kDa	
Observed MW	35 kDa	
Accession	NP_001329.1	
Bio-activity	Measured by the ability of the immobilized protein to support the adhesion of mouse	
	neutrophils. When 5 x 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	> 92 % 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 $< -20^{\circ}$ 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% Tween 80 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

KDa	MK	R
116 66.2	=	
45.0	-	
35.0	-	-
25.0	-	
18.4 14.4	=	

> 92 % as determined by reducing SDS-PAGE.

Background

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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 9 7%, 90% sequence identity with the corresponding regions of rat, human CXADR.