Recombinant Human NKG2D/CD314 Protein (His Tag)

Catalog Number: PKSH033409



Description		
Species	Human	
Mol_Mass	16.9 kDa	
Accession	P26718	
Bio-activity	Not validated for activity	
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 $< -20^{\circ}$ C 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.	
	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.	

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

kDa 120 90	МК	R
90	Contraction of the	
60		
40		
30	-	
20	-	
14		

> 95 % as determined by reducing SDS-PAGE.

Background

Data

NKG2-D type II integral membrane protein (NKG2D) is a type II transmembrane glycoprotein which belongs to the CD94/ NKG2 family. NKG2D is expressed on natural killer (NK) cells; CD8+ alpha-beta and gamma-delta T-cells. As an activating and costimulatory receptor; it involved in immunosurveillance upon binding to various cellular stressinducible ligands displayed at the surface of autologous tumor cells and virus-infected cells. It provides both stimulatory and costimulatory innate immune responses on activated killer (NK) cells; leading to cytotoxic activity. It stimulates perforin-mediated elimination of ligand-expressing tumor cells. Signaling involves calcium influx; culminating in the expression of TNF-alpha. NKG2D participates in NK cell-mediated bone marrow graft rejection and survival of NK cells. It Binds to ligands belonging to various subfamilies of MHC class I-related glycoproteins including MICA; MICB; RAET1E; RAET1G; ULBP1; ULBP2; ULBP3 (ULBP2>ULBP1>ULBP3) and ULBP4.

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