

Recombinant Human NKG2D/CD314 Protein (His Tag)

Catalog Number: PKSH033409

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

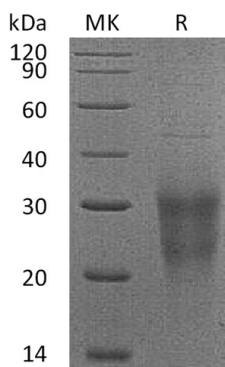
Description

| | |
|----------------------|---|
| Species | Human |
| Source | HEK293 Cells-derived Human NKG2D/CD314 protein Phe78-Val216, with an N-terminal His |
| Calculated MW | 16.9 kDa |
| Observed MW | 20-33 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°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. |

Data



> 95 % as determined by reducing SDS-PAGE.

Background

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 stress-inducible 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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