

Product Data:**Product SKU:** RPES0868**Size:** 10µg**Species:** Human**Expression host:** Human Cells**Uniprot:** P26718**Protein Information:****Molecular Mass:** 42.4 kDa**AP Molecular Mass:** 32 kDa**Tag:** N-Fc**Bio-activity:****Purity:** > 95% as determined by reducing SDS-PAGE.**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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, pH7.4.**Reconstitution:** Please refer to the printed manual for detailed information.**Application:****Synonyms:** CD314; KLRK1; CD314 antigen; Killer cell lectin-like receptor subfamily K member 1; killer cell lectin-like receptor subfamily K; member 1; KLR; NK cell receptor D; NKG2-D; NKG2-D type II integral membrane protein; NKG2-D-activating NK recepto

Immunogen Information:

Sequence: Phe78-Val216

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 is 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.