



Recombinant Protein Technical Manual

Recombinant Human NKG2D/CD314 Protein (aa 78-216, His Tag)(Active)
RPES1913

Product Data:

Product SKU: RPES1913

Size: 50µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: NP_031386.2

Protein Information:

Molecular Mass: 18.4 kDa

AP Molecular Mass:

Tag: N-His

Bio-activity: 1. Immobilized human His-NKG2D (78-216) at 10 µg/ml (100 µl/well) can bind human ULBP1-Fch, The EC50 of human ULBP1-Fch is 0.04-0.08 µg/ml.2. Immobilized human His-NKG2D (78-216) at 10 µg/ml (100 µl/well) can bind human MICB-Fch, The EC50 of human MICB-Fch is 15.9-37.1 ng/ml.

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Storage: 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 20mM Tris, 500mM NaCl, pH 8.0, 10% gly

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

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:

NKG2D, also known as CD314, is an immune receptor which consists of two disulphide-linked type II transmembrane proteins with short intracellular proteins incapable to transduce signals. In order to transduce signals, NKG2D needs adaptor proteins and it uses two adaptor proteins, DAP10 and DAP12. These two adaptor proteins associate as homodimers to NKG2D- therefore the entire receptor complex appears as a hexamer. NKG2D can send co-stimulatory signals to activate CD8 T cells. NKG2D also plays an important role in viral control. Cellular stress can induce ligands for NKG2D which results in the cell susceptible to NK cell-mediated lysis.