

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

Catalog No. PKSH031517

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

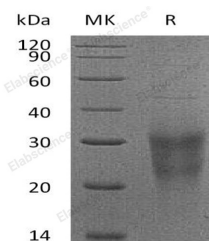
Description

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
Species	Human
Expression Host	Baculovirus-Insect Cells
Sequence	Phe78-Val216
Accession	NP_031386.2
Calculated Molecular Weight	18.4 kDa
Tag	N-His
Bioactivity	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.

Properties

Purity	> 90 % 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 sterile 20mM Tris, 500mM NaCl, pH 8.0, 10% glycerol Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 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



> 90 % as determined by reducing SDS-PAGE.

For Research Use Only

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.