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

Catalog Number: PKSH031517

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

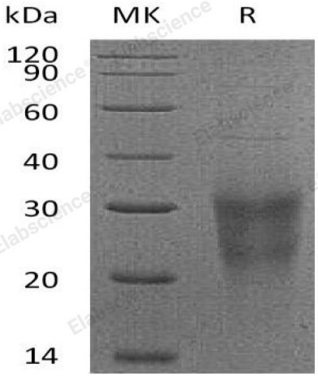
Description

Species	Human
Source	Baculovirus-Insect Cells-derived Human NKG2D/CD314 protein Phe78-Val216, with an N-terminal His
Calculated MW	18.4 kDa
Accession	NP_031386.2
Bio-activity	1. Immobilized human His-NKG2D (78-216) at 10 μg/ml (100 μl/well) can bind human ULBP1-Fch, The EC_{50} 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 EC_{50} 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 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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% 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



> 90 % as determined by reducing SDS-PAGE.

Background

NKG2D, also known as CD314, is an immune receptor which consists of two disulphide-linked type II transmembrane proteins with short intracellular proteins uncapable 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.