

Synonym

NKG2D,CD314,KLRK1,NK cell receptor D

Source

Human NKG2D, His Tag(NKD-H5245) is expressed from human 293 cells (HEK293). It contains AA Ile 73 - Val 216 (Accession # <u>P26718-1</u>). Predicted N-terminus: His

Molecular Characterization

Poly-his

NKG2D(Ile 73 - Val 216) P26718-1

This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 18.5 kDa. The protein migrates as 30-45 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

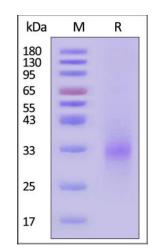
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human NKG2D, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

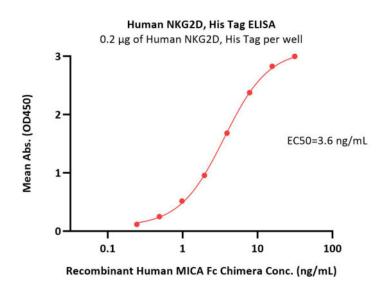
Bioactivity-ELISA



Human NKG2D / CD314 Protein, His Tag

Catalog # NKD-H5245





Immobilized Human NKG2D Protein, His Tag (Cat. No. NKD-H5245) at 2 μ g/mL (100 μ L/well) can bind Recombinant Human MICA Fc Chimera with a linear range of 0.2-4 ng/mL (QC tested).

Background

NKG2D is a transmembrane protein belonging to the CD94/NKG2 family of C-type lectin-like receptors, also known as KLRK1, CD314, D12S2489E, KLR and killer cell lectin like receptor K1. NKG2D itself forms a homodimer whose ectodomains serve for ligand binding. NKG2D is a major recognition receptor for the detection and elimination of transformed and infected cells as its ligands are induced during cellular stress, either as a result of infection or genomic stress such as in cancer. In NK cells, NKG2D serves as an activating receptor, which itself is able to trigger cytotoxicity. The function of NKG2D on CD8+ T cells is to send costimulatory signals to activate them.

Clinical and Translational Updates

