

**Synonym**

NKG2D,CD314,KLRK1,NK cell receptor D

**Source**

Human NKG2D Protein, Fc Tag(NKD-H5265) is expressed from human 293 cells (HEK293). It contains AA Ile 73 - Val 216 (Accession # [P26718-1](#)).

Predicted N-terminus: Pro

**Molecular Characterization**

Fc(Pro 100 - Lys 330) P01857	NKG2D(Ile 73 - Val 216) P26718-1
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This protein carries a human IgG1 Fc tag at the N-terminus

The protein has a calculated MW of 43.1 kDa. The protein migrates as 50-60 kDa 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.

>90% as determined by SEC-HPLC.

**Formulation**

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM Glycine, 150 mM NaCl, pH7.5 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.*

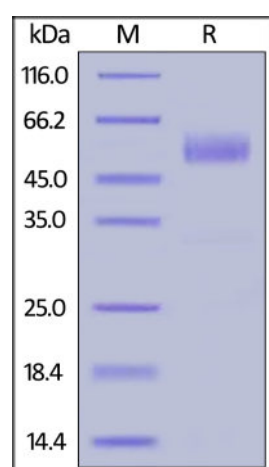
**Storage**

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

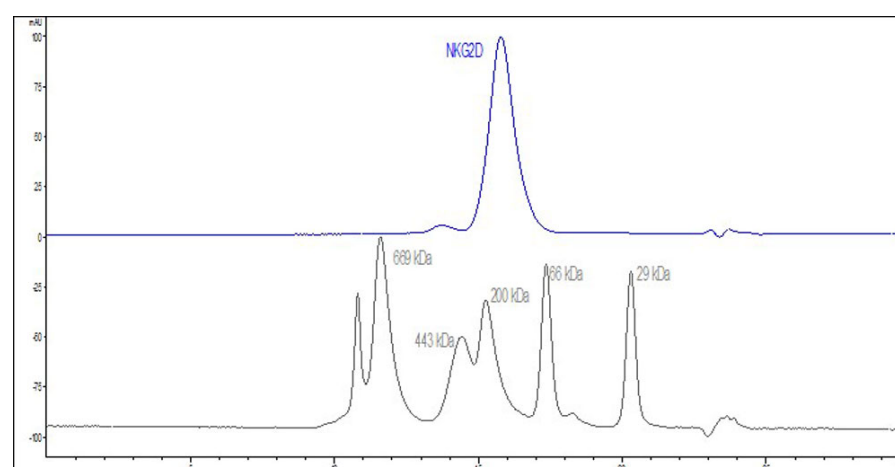
*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

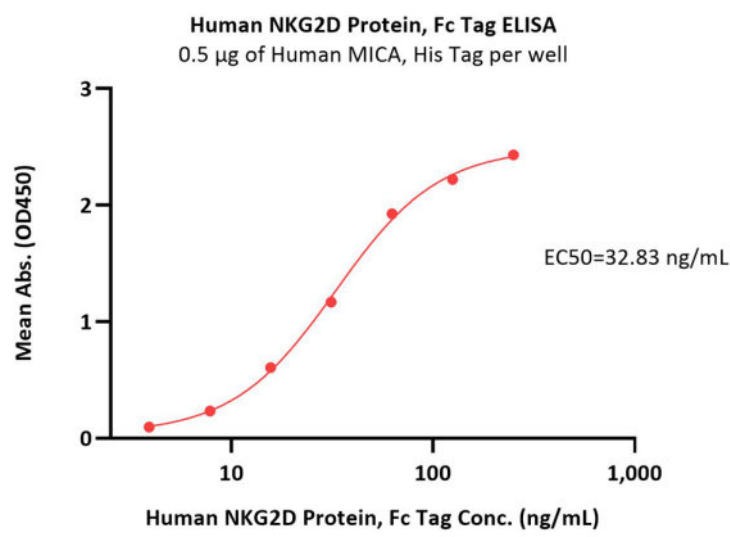
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**

Human NKG2D Protein, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

**Bioactivity-ELISA****SEC-HPLC**

The purity of Human NKG2D Protein, Fc Tag (Cat. No. NKD-H5265) was greater than 90% as determined by SEC-HPLC.



Immobilized Human MICA, His Tag (Cat. No. MIA-H5221) at 5 µg/mL (100 µL/well) can bind Human NKG2D Protein, Fc Tag (Cat. No. NKD-H5265) with a linear range of 4-63 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<sup>+</sup> T cells is to send co-stimulatory signals to activate them.

## Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.