

**Synonym**

NKG2D,CD314,KLRK1,NK cell receptor D

**Source**

Biotinylated Human NKG2D, Avitag,Fc Tag(NKD-H82F4) is expressed from human 293 cells (HEK293). It contains AA Ile 73 - Val 216 (Accession # [P26718-1](#) ).

Predicted N-terminus: Gly

**Molecular Characterization**

|     |                                 |                                     |
|-----|---------------------------------|-------------------------------------|
| Avi | Fc(Pro 100 - Lys 330)<br>P01857 | NKG2D(Ile 73 - Val 216)<br>P26718-1 |
|-----|---------------------------------|-------------------------------------|

This protein carries an Avi tag (Avitag™) at the N-terminus, followed by a human IgG1 Fc tag

The protein has a calculated MW of 44.8 kDa. The protein migrates as 55-65 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Labeling**

*Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.*

**Protein Ratio**

Passed as determined by the HABA assay / binding ELISA.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

**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**

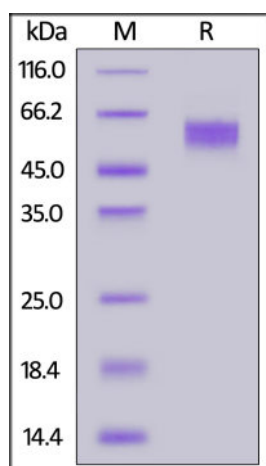
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*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.

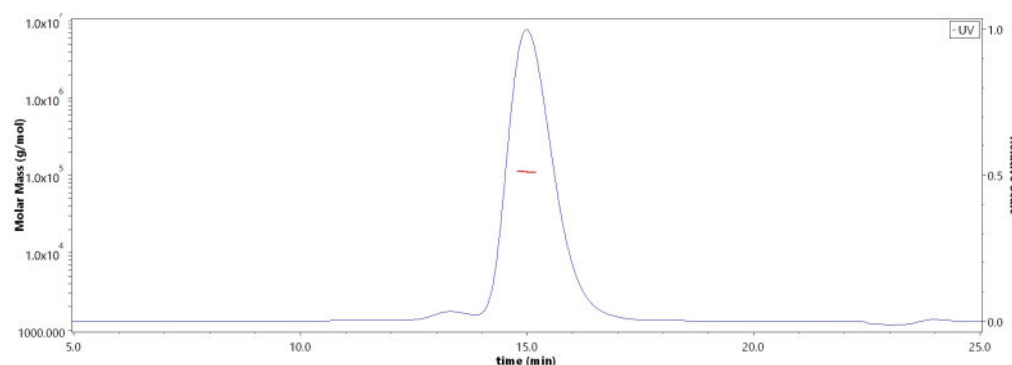
**SDS-PAGE**



Biotinylated Human NKG2D, Avitag,Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

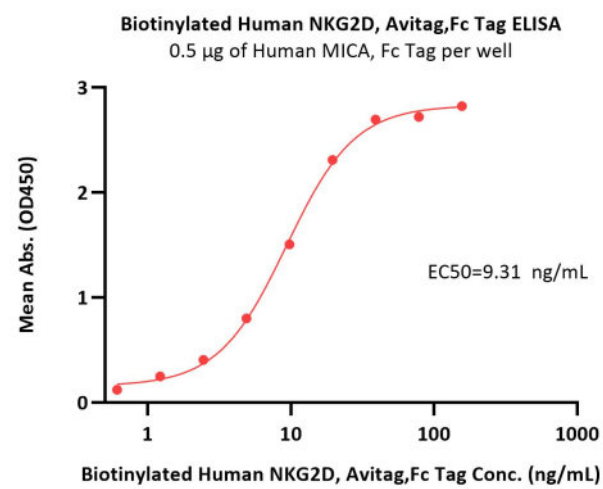
**Bioactivity-ELISA**

**SEC-MALS**



The purity of Biotinylated Human NKG2D, Avitag,Fc Tag (Cat. No. NKD-H82F4) is more than 90% and the molecular weight of this protein is around 100-122 kDa verified by SEC-MALS.

[Report](#)



Immobilized Human MICA, Fc Tag (Cat. No. MIA-H5253) at 5 µg/mL (100 µL/well) can bind Biotinylated Human NKG2D, Avitag,Fc Tag (Cat. No. NKD-H82F4) with a linear range of 0.6-20 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 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.