

Human NKG2D/CD314 Protein

Cat. No. NKG-HM22D



Description

| | |
|-------------------------|--|
| Source | Recombinant Human NKG2D/CD314 Protein is expressed from HEK293 with hFc tag and Flag tag at the N-Terminus. It contains Phe78-Val216. |
| Accession | P26718 |
| Molecular Weight | The protein has a predicted MW of 43.4 kDa. Due to glycosylation, the protein migrates to 50-70 kDa based on Bis-Tris PAGE result. |
| Endotoxin | Less than 1EU per µg by the LAL method. |
| Purity | > 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC |

Formulation and Storage

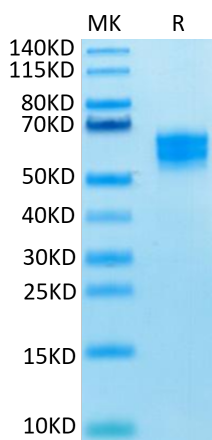
| | |
|-----------------------|---|
| Formulation | Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization. |
| Reconstitution | Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water. |
| Storage | -20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles. |

Background

NKG2D is a type II transmembrane glycoprotein having an extracellular lectin-like domain. This domain lacks the recognizable calcium-binding sites found in true C-type lectins and binds protein rather than carbohydrate ligands. Human NKG2D is expressed on CD8 alpha beta T cells, gamma δ T cells, NK cells and NKT cells.

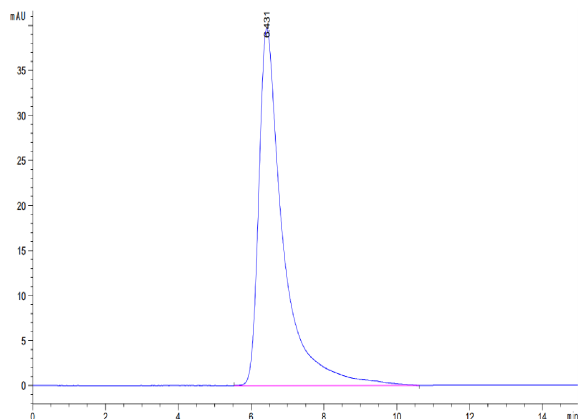
Assay Data

Bis-Tris PAGE



Human NKG2D on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



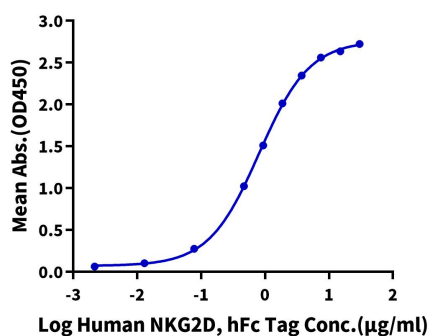
The purity of Human NKG2D is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human NKG2D, hFc Tag ELISA

0.5µg Human MICA, His Tag Per Well

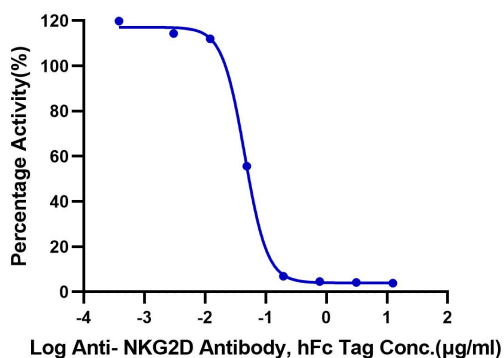


Immobilized Human MICA, His Tag at 5µg/ml (100µl/Well) on the plate. Dose response curve for Human NKG2D, hFc Tag with the EC50 of 0.81µg/ml determined by ELISA (QC Test).

Blocking Data

Inhibition of Human NKG2D and ULBP-2 Binding

0.5µg Human NKG2D, hFc Tag Per Well



Serial dilutions of Anti-NKG2D Antibody, hFc Tag were added into Biotinylated Human ULBP-2, His Tag : Human NKG2D, hFc Tag binding reactions. The half maximal inhibitory concentration (IC50) is 45.2ng/ml.