

# Human NKG2D/CD314 Protein

Cat. No. NKG-HM42D

## Description

<b>Source</b>	Recombinant Human NKG2D/CD314 Protein is expressed from HEK293 with His tag and Avi tag at the N-Terminus. It contains Phe78-Val216.
<b>Accession</b>	P26718
<b>Molecular Weight</b>	The protein has a predicted MW of 19.0 kDa. Due to glycosylation, the protein migrates to 36-38 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE

## Formulation and Storage

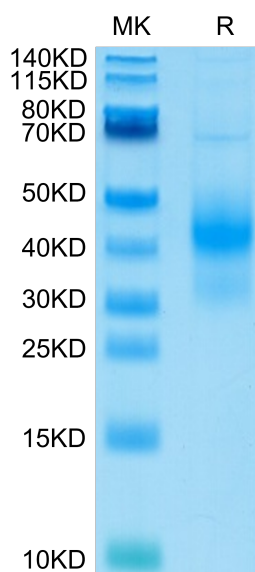
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-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  $\delta$  T cells, NK cells and NKT cells.

## Assay Data

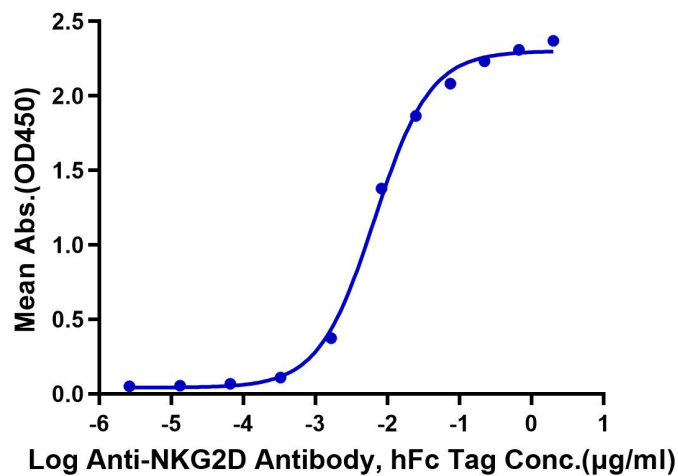
### Bis-Tris PAGE



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

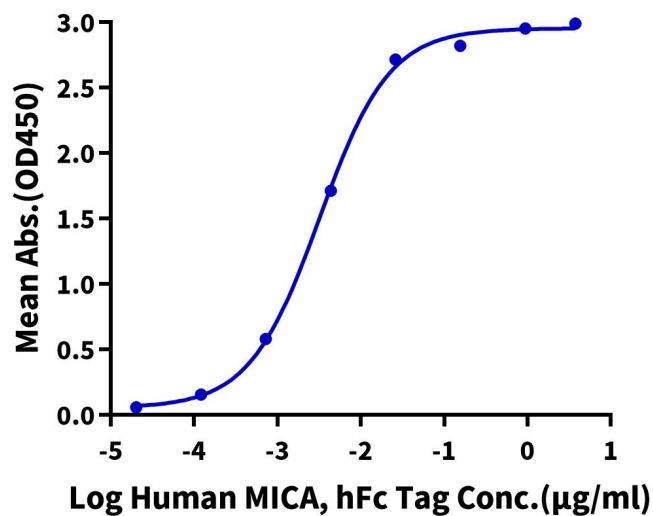
### ELISA Data

## Assay Data

**Human NKG2D, His Tag ELISA**0.1 $\mu$ g Human NKG2D, His Tag Per Well

Immobilized Human NKG2D, His Tag at 1 $\mu$ g/ml (100 $\mu$ l/well) on the plate. Dose response curve for Anti-NKG2D Antibody, hFc Tag with the EC50 of 6.6ng/ml determined by ELISA (QC Test).

## ELISA Data

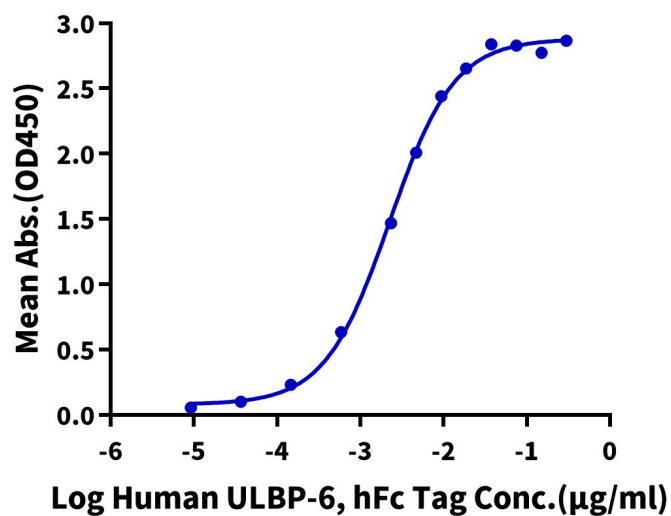
**Human NKG2D, His Tag ELISA**0.5 $\mu$ g Human NKG2D, His Tag Per Well

Immobilized Human NKG2D, His Tag at 5 $\mu$ g/ml (100 $\mu$ l/Well) on the plate. Dose response curve for Human MICA, hFc Tag with the EC50 of 3.2ng/ml determined by ELISA.

## ELISA Data

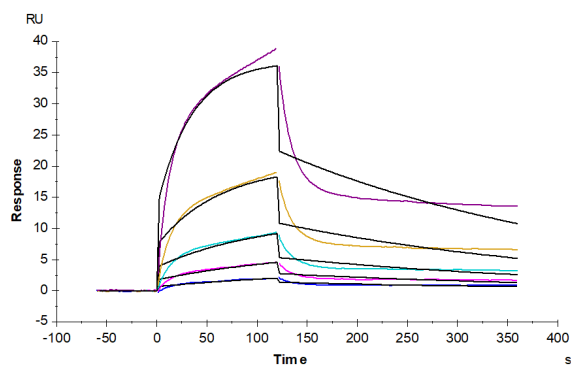
## Assay Data

## Human NKG2D, His Tag ELISA

0.2  $\mu\text{g}$  Human NKG2D, His Tag Per Well

Immobilized Human NKG2D, His Tag at 2  $\mu\text{g}/\text{ml}$  (100  $\mu\text{l}/\text{well}$ ) on the plate. Dose response curve for Human ULBP-6, hFc Tag with the EC50 of 2.2  $\text{ng}/\text{ml}$  determined by ELISA.

## SPR Data



Human MICB, hFc Tag captured on CM5 Chip via Protein A can bind Human NKG2D, His Tag with an affinity constant of 95.15  $\text{nM}$  as determined in SPR assay (Biacore T200).