Human NKG2D/CD314 Protein

Cat. No. NKG-HM42D

Description

Source	Recombinant Human NKG2D/CD314 Protein is expressed from HEK293 with His tag and Avi tag at the N-Terminus.
	It contains Phe78-Val216.
Accession	P26718
Molecular Weight	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.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE

Formulation and Storage

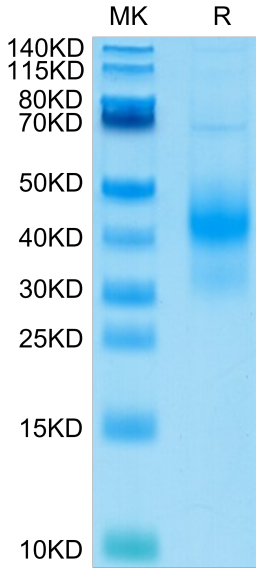
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled 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

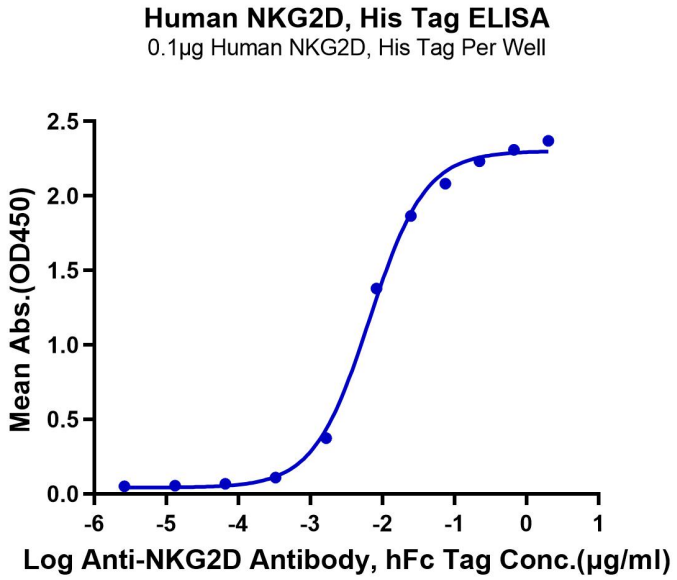
Bis-Tris PAGE



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

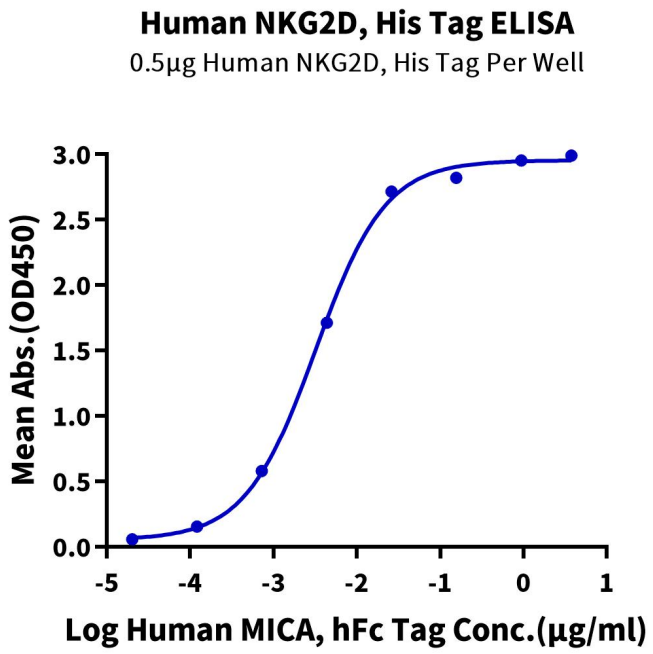
ELISA Data

Assay Data



Immobilized Human NKG2D, His Tag at 1μg/ml (100μl/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).

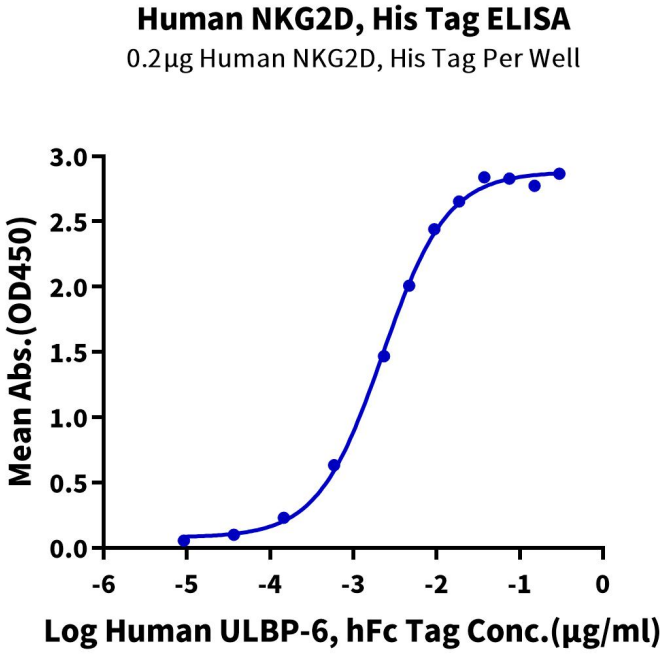
ELISA Data



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

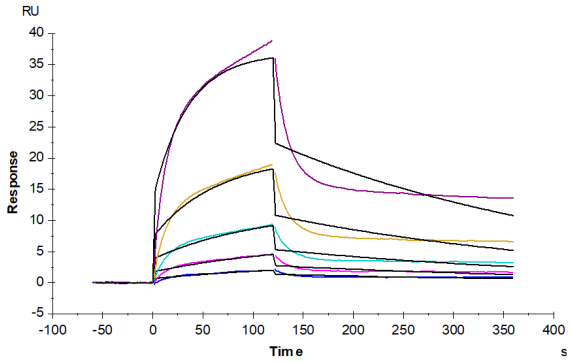
ELISA Data

Assay Data



Immobilized Human NKG2D, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Human ULBP-6, hFc Tag with the EC50 of 2.2ng/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 nM as determined in SPR assay (Biacore T200).