

Human NKG2A&CD94 Protein

Cat. No. NKC-HM394

Description

Source	Recombinant Human NKG2A&CD94 Protein is expressed from HEK293 with mFc (IgG1) tag at the C-Terminus. It contains Arg100-Leu233(NKG2A)&Ser34-Ile179(CD94).
Accession	P26715-1(NKG2A)&Q13241-1(CD94)
Molecular Weight	The protein has a predicted MW of 56.9 kDa. Due to glycosylation, the protein migrates to 70-90 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 24 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

The ligand-receptor assignment between HLA-G and NKG2A/CD94 is dependent of the amino acid composition in the HLA-G heavy chain. Understanding the biophysical basis of receptor-mediated events that lead to NK cell inhibition would help to remove non-tumor reactive cells and support personalized mild autologous NK cell therapies.

Assay Data

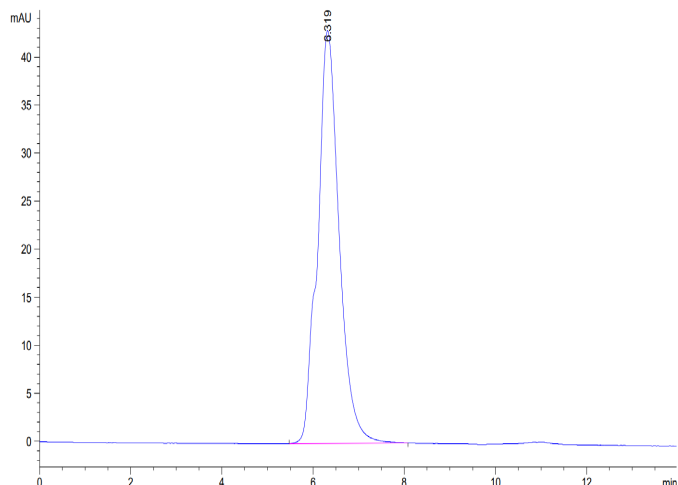
Bis-Tris PAGE



Human NKG2A&CD94 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

Assay Data

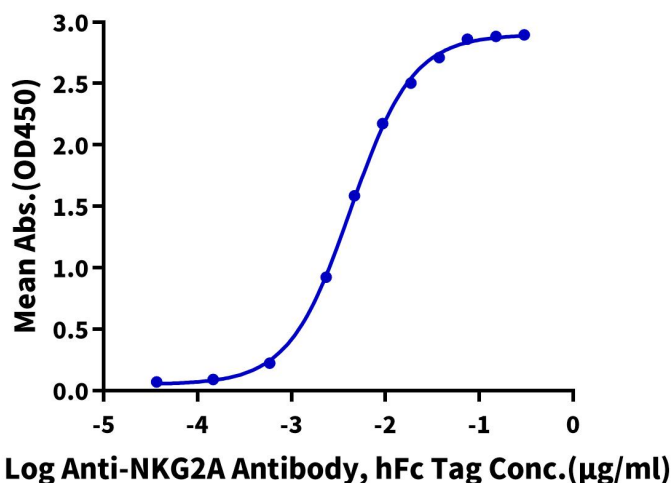


The purity of Human NKG2A&CD94 is greater than 95% as determined by SEC-HPLC.

ELISA Data

Human NKG2A&CD94, mFc Tag ELISA

0.1µg Human NKG2A&CD94, mFc Tag Per Well

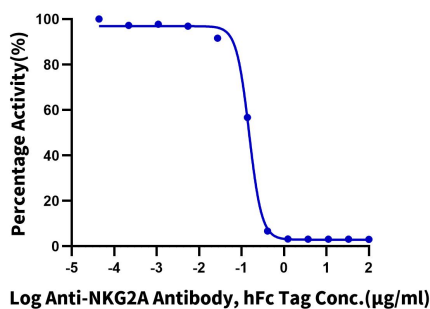


Immobilized Human NKG2A&CD94, mFc Tag at 1 µg/ml (100µl/well) on the plate. Dose response curve for Anti-NKG2A Antibody, hFc Tag with the EC50 of 4.2ng/ml determined by ELISA (QC Test).

Blocking Data

Inhibition of Human NKG2A&CD94 and HLA-E Tetramer Binding

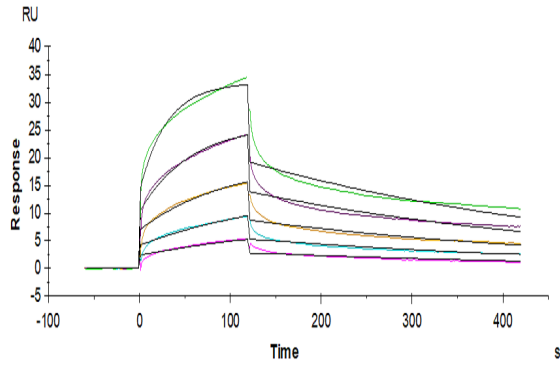
0.2µg Human NKG2A&CD94, mFc Tag Per Well



Serial dilutions of Anti-NKG2A Antibody were added into Biotinylated Human HLA-E*01:03 Complex Tetramer, His Tag : Human NKG2A&CD94, mFc Tag binding reactions. The half maximal inhibitory concentration (IC50) is 0.15µg/ml.

SPR Data

Assay Data



Human NKG2A&CD94, mFc Tag captured on CM5 Chip via Anti-mouse Antibody can bind Human HLA-E Complex Tetramer, His Tag with an affinity constant of 7.90 nM as determined in SPR assay (Biacore T200).