

# Human NKG2A&CD94 Protein

Cat. No. NKC-HM394

## Description

|                         |   |
|-------------------------|---|
| <b>Source</b>           | 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). |
| <b>Accession</b>        | P26715-1(NKG2A)&Q13241-1(CD94)  |
| <b>Molecular Weight</b> | 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.                        |
| <b>Endotoxin</b>        | Less than 1EU per µg by the LAL method.   |
| <b>Purity</b>           | > 95% as determined by Bis-Tris PAGE<br>> 95% as determined by HPLC   |

## Formulation and Storage

|                       |   |
|-----------------------|---|
| <b>Formulation</b>    | Lyophilized from 0.22µm 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 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.  |
| <b>Storage</b>        | -20 to -80°C for 24 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

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.

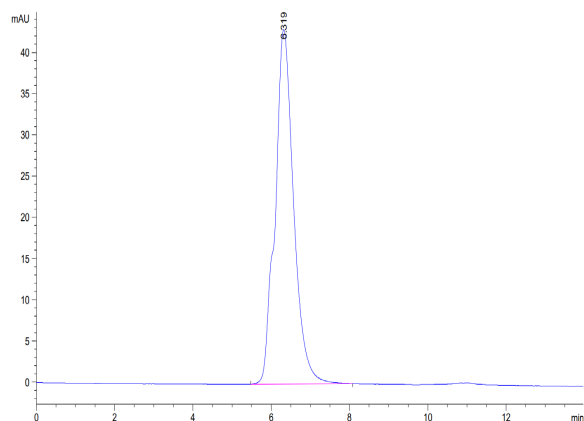
## Assay Data

### Bis-Tris PAGE



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

### SEC-HPLC



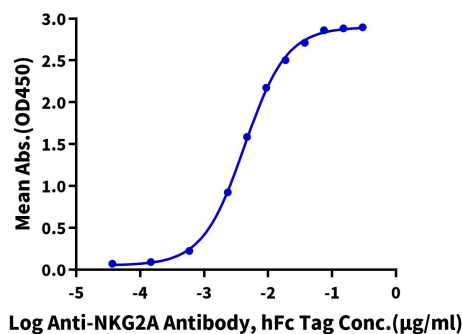
The purity of Human NKG2A&CD94 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human NKG2A&CD94, mFc Tag ELISA

0.1µg Human NKG2A&CD94, mFc Tag Per Well

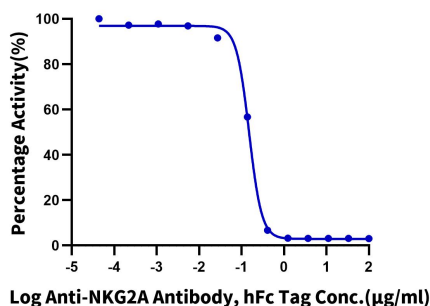


Immobilized Human NKG2A&CD94, mFc Tag at 1 µg/ml (100µl/well) on the plate. Dose response curve for Anti-NKG2A Antibody, hFc Tag with the EC50 of 4.2ng/ml determined by ELISA (QC Test).

Blocking Data

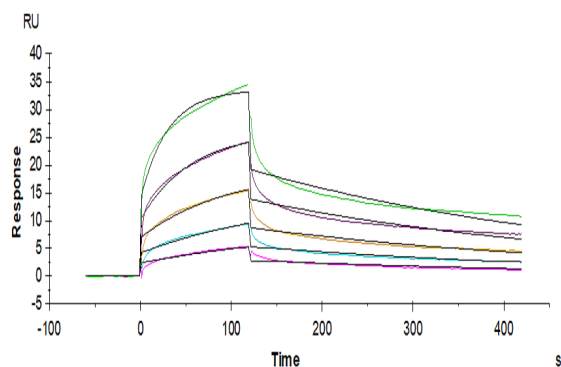
Inhibition of Human NKG2A&CD94 and HLA-E Tetramer Binding

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



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).