### Catalog # NC4-H5253



#### Synonym

NKG2A & CD94

### Source

Human NKG2A&CD94, Mouse IgG2a Fc Tag(NC4-H5253) is expressed from human 293 cells (HEK293). It contains AA Ala 113 - Leu 233 (NKG2A) & Asp 57 - Ile 179 (CD94) (Accession # <u>P26715-1</u> (NKG2A) & <u>Q13241-1</u> (CD94)). Predicted N-terminus: Ala 113

# **Molecular Characterization**

This protein carries a mouse IgG2a Fc tag at the C-terminus.

The protein has a calculated MW of 55.5 kDa. The protein migrates as 65-80 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Endotoxin

Less than 0.1 EU per  $\mu g$  by the LAL method.

# Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

## Formulation

Lyophilized from  $0.22 \ \mu m$  filtered solution in 50 mM Tris, 100 mM Glycine, 150 mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

## Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

## Storage

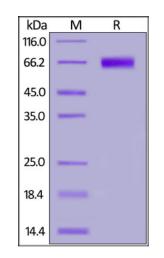
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

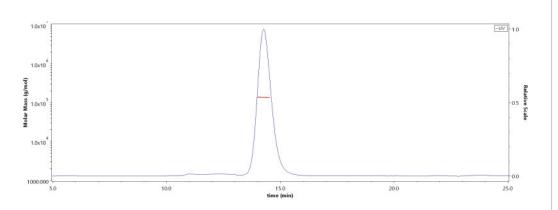
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

# **SDS-PAGE**



Human NKG2A&CD94, Mouse IgG2a Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

# SEC-MALS



The purity of Human NKG2A&CD94, Mouse IgG2a Fc Tag (Cat. No. NC4-H5253) is more than 90% and the molecular weight of this protein is around 125-145 kDa verified by SEC-MALS. <u>Report</u>

**Bioactivity-ELISA** 

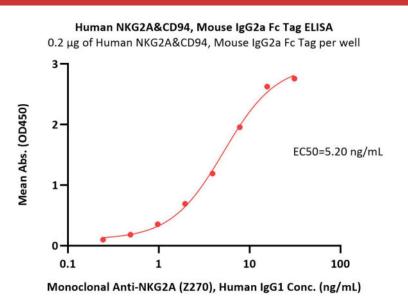
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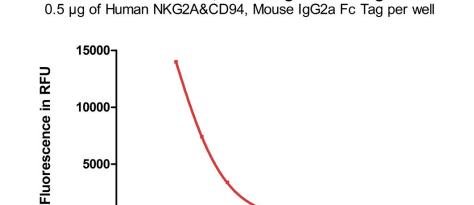
# Human NKG2A&CD94 Protein, Mouse IgG2a Fc Tag (MALS verified)



#### Catalog # NC4-H5253



Immobilized Human NKG2A&CD94, Mouse IgG2a Fc Tag (Cat. No. NC4-H5253) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Monoclonal Anti-NKG2A (Z270), Human IgG1 with a linear range of 0.2-8 ng/mL (QC tested).



Human NKG2A&CD94, Mouse IgG2a Fc Tag ELISA

Multiple dilutions of HLA-E\*01:03 HLA-A leader 3-11-tetramer-VMAPRTLVL-PE

10<sup>3</sup>

104

10<sup>2</sup>

0-

10<sup>1</sup>

Immobilized Human NKG2A&CD94, Mouse IgG2a Fc Tag (Cat. No. NC4-H5253) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind various dilution ratio of HLA-E\*01:03 HLA-A leader3-11 Tetramer-VMAPRTLVL-PE (Routinely tested).

### Background

CD94 plays a role as a receptor for the recognition of MHC class I HLA-E molecules by NK cells and some cytotoxic T-cells. KLRD1 (CD94) is an antigen preferentially expressed on NK cells and is classified as a type II membrane protein because it has an external C terminus. NKG2A/CD159a is a transmembrane protein belonging to the CD94/NKG2 family of C-type lectin-like receptors that inhibits innate immune system activation. CD94 pairs with the NKG2 molecule as a heterodimer. The CD94/NKG2 complex, on the surface of natural killer cells interacts with Human Leukocyte Antigen (HLA)-E on target cells.

#### **Clinical and Translational Updates**

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.



