



## **Synonym**

NKG2A & CD94

#### Source

Biotinylated Cynomolgus NKG2A&CD94, Fc,Avitag(NC4-C82F7) is expressed from human 293 cells (HEK293). It contains AA Ala 113 - Leu 233 (NKG2A) & Asp 57 - Ile 179 (CD94) (Accession # Q68VD2 (NKG2A) & Q68VD4 (CD94)).

## **Molecular Characterization**

This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag<sup>TM</sup>).

The protein has a calculated MW of 56.8 kDa. The protein migrates as 65-68 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Labeling

Biotinylation of this product is performed using Avitag<sup>TM</sup> technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

#### **Protein Ratio**

Passed as determined by the HABA assay / binding ELISA.

## **Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  filtered solution in PBS, pH7.4 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

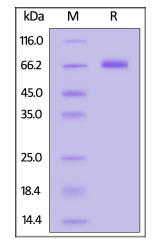
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

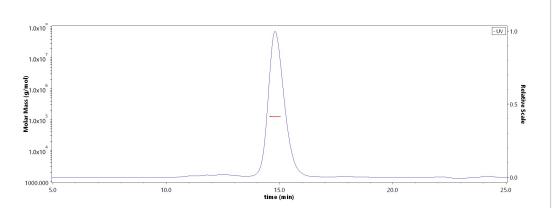
# SDS-PAGE



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

## **Bioactivity-ELISA**

### **SEC-MALS**



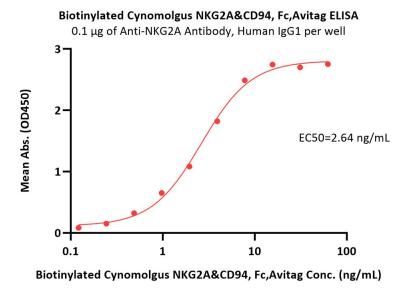
The purity of Biotinylated Cynomolgus NKG2A&CD94, Fc, Avitag (Cat. No. NC4-C82F7) is more than 90% and the molecular weight of this protein is around 115-135 kDa verified by SEC-MALS.

<u>Report</u>

# Biotinylated Cynomolgus NKG2A&CD94 Protein, Fc,Avitag™ (MALS verified)

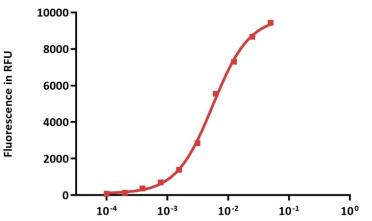
Catalog # NC4-C82F7





Immobilized Anti-NKG2A Antibody, Human IgG1 at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Cynomolgus NKG2A&CD94, Fc,Avitag (Cat. No. NC4-C82F7) with a linear range of 0.1-16 ng/mL (QC tested).

#### Biotinylated Cynomolgus NKG2A&CD94, Fc, Avitag ELISA



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

Immobilized Biotinylated Cynomolgus NKG2A&CD94, Fc,Avitag (Cat. No. NC4-C82F7) at 1  $\mu$ g/mL (100  $\mu$ L/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5  $\mu$ g/well) plate 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.

