

### Synonym

NCR1,LY94,CD335,NK-p46,hNKp46

#### Source

Biotinylated Human NKp46, His, Avitag, premium grade(NP6-H82H3) is expressed from human 293 cells (HEK293). It contains AA Gln 22 - Arg 258 (Accession # <u>076036-1</u>).

It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.

### **Molecular Characterization**

NKp46(Gln 22 - Arg 258) O76036-1

Poly-his Avi

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

The protein has a calculated MW of 30.6 kDa. The protein migrates as 38-46 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.

# Endotoxin

Less than 0.1 EU per µg by the LAL method.

## **Host Cell Protein**

<0.5 ng/µg of protein tested by ELISA.

# **Host Cell DNA**

<0.02 ng/μg of protein tested by qPCR.

### **Sterility**

Negative

# Mycoplasma

Negative.

### **Purity**

>90% as determined by SDS-PAGE.

>95% 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.

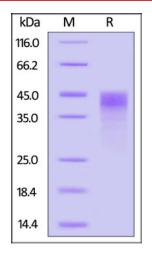
**SDS-PAGE** 

SEC-MALS

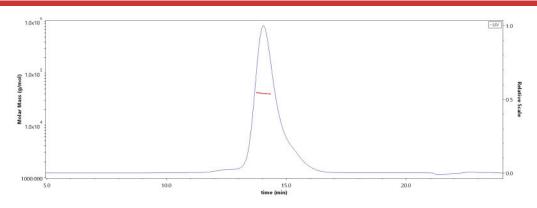
# Biotinylated Human NKp46 Protein, His,Avitag™, premium grade

Catalog # NP6-H82H3





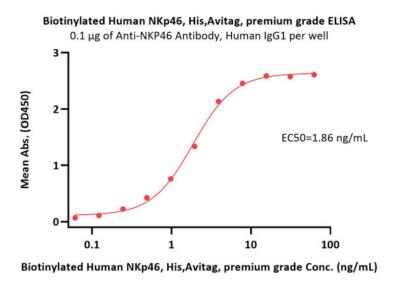
Biotinylated Human NKp46, His, Avitag, premium grade on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.



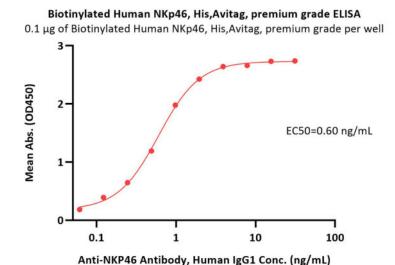
The purity of Biotinylated Human NKp46, His, Avitag, premium grade (Cat. No. NP6-H82H3) is more than 95% and the molecular weight of this protein is around 35-45 kDa verified by SEC-MALS.

Report

# **Bioactivity-ELISA**



Immobilized Anti-NKP46 Antibody, Human IgG1 at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Human NKp46, His,Avitag, premium grade (Cat. No. NP6-H82H3) with a linear range of 0.1-4 ng/mL (QC tested).



Immobilized Biotinylated Human NKp46, His,Avitag, premium grade (Cat. No. NP6-H82H3) at 1  $\mu$ g/mL (100  $\mu$ L/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5  $\mu$ g/well) plate can bind Anti-NKP46 Antibody, Human IgG1 with a linear range of 0.1-2 ng/mL (Routinely tested).

## Background

Natural cytotoxicity triggering receptor 1 (NCR1) is also known as Natural killer cell p46-related protein (NK-p46), Lymphocyte antigen 94 homolog (LY94), CD antigen CD335, which belongs to the natural cytotoxicity receptor (NCR) family. NCR1 contains two Ig-like (immunoglobulin-like) domains. NCR1 interacts with CD247 and FCER1G. NCR1 / CD335 may contribute to the increased efficiency of activated natural killer (NK) cells to mediate tumor cell lysis.

## **Clinical and Translational Updates**

