# Human IgG1 (N297A) Kappa Isotype Control, premium grade (mAb, carrier free)

Catalog # DNP-MB273





#### Source

Human IgG1 (N297A) Kappa Isotype Control, premium grade (mAb) is a chimeric monoclonal antibody recombinantly expressed from human 293 cells (HEK293), which combines the variable region of a mouse monoclonal antibody with human IgG1 constant domain.

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.

## Isotype

Human IgG1 (N297A) | Human Kappa

# Application

This antibody is suitable for use as a non-targeting isotype control in various in vitro and in vivo studies. It can also be used as a negative control in various applications such as ELISA, Western blot, immunofluorescence, immunohistochemistry, immunoprecipitation, and flow cytometry. Each laboratory should determine an optimum working titer for use in its particular application.

## **Specificity**

This product is a specific antibody specifically reacts with DNP.

## **Endotoxin**

Less than 0.1 EU per μg by the LAL method / rFC method.

# **Purity**

>90% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

## **Sterility**

Negative

## Mycoplasma

Negative

#### **Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

25 mg or larger size will be supplied as liquid and shipped by dry ice. Please inquire the dry ice shipping cost.

#### 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.

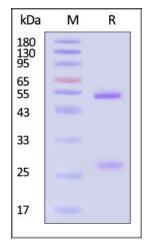
## **Storage**

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

This product is stable after storage at:

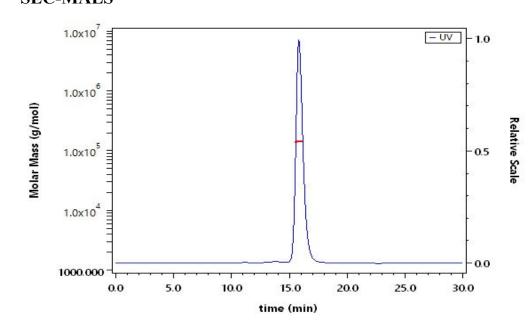
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**



Human IgG1 (N297A) Kappa Isotype Control, premium grade (mAb) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue.

# **SEC-MALS**





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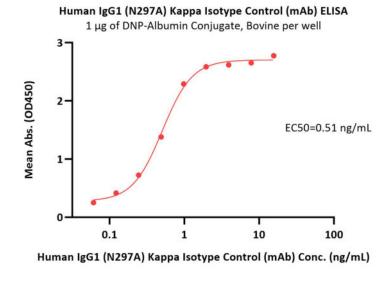


The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained</u> <u>Protein Marker</u>).

The purity of Human IgG1 (N297A) Kappa Isotype Control, premium grade (mAb) (Cat. No. DNP-MB273) is more than 95% and the molecular weight of this protein is around 135-155 kDa verified by SEC-MALS.

Report

# **Bioactivity-ELISA**



Immobilized DNP-Albumin Conjugate, Bovine at  $10 \mu g/mL$  ( $100 \mu L/well$ ) can bind Human IgG1 (N297A) Kappa Isotype Control, premium grade (mAb) (Cat. No. DNP-MB273) with a linear range of 0.1-1 ng/mL (QC tested).

## Background

A hapten is a small molecule that can elicit an immune response only when conjugated with a large carrier such as a protein. Typical haptens include drugs, urushiol, quinone, steroids, etc. Peptides and non-protein antigens usually need conjugating to a carrier protein (such as BSA (bovine serum albumin) or KLH (keyhole limpet hemocyanin) to become good immunogens). Additionally, haptens should be administered with an adjuvant to ensure a high quality immune response. It is important that the hapten design (preserving greatly the chemical structure and spatial conformation of target compound), selection of the appropriate carrier protein and the conjugation method are key conditions for the desired specificity anti-hapten antibodies. We design anti-hapten antibodies based on the HaptenDB information.

