Anti-SARS-CoV-2 Nucleocapsid Antibody, Chimeric mAb, Human IgG1 (AM223) (MALS verified)

Catalog # NUN-CH15





Source

Anti-SARS-CoV-2 Nucleocapsid Antibody, Chimeric mAb, Human IgG1 is a chimeric monoclonal antibody recombinantly expressed from CHO cells, which combines the variable region of a mouse monoclonal antibody with human IgG1 constant domain. The mouse monoclonal antibody was obtained from a mouse immunized with recombinant SARS-CoV-2 Nucleocapsid Protein. This chimeric antibody is purified by Protein A affinity chromatography. As verified by binding test with N-NTD (Cat. No. NUN-C5143) and N-CTD (Cat. No. NUN-C5145) protein, this antibody can only bind to N-CTD (AA Ser 255 - Pro 364). It can also bind multiple N protein variants with similar affinity as compared to the wild type N protein (Cat. No. NUN-C5227).

Isotype

Human IgG1/kappa

Specificity

This product can recognize SARS-CoV-2 Nucleocapsid protein. Cross-reactivity with Nucleocapsid protein of other coronaviruses has not been tested.

Application

This antibody can be paired with other Anti-SARS-CoV-2 nucleocapsid antibodies (Cat. No. NUN-CH14) to detect SARS-CoV-2 nucleocapsid protein in sandwich ELISA or LFA assay.

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Formulation

Supplied as 0.2 µm filtered solution in PBS, pH7.4.

Contact us for customized product form or formulation.

Shipping

This product is supplied and shipped with dry ice, please inquire the shipping cost.

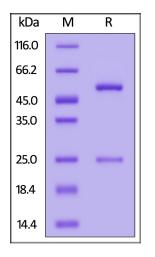
Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

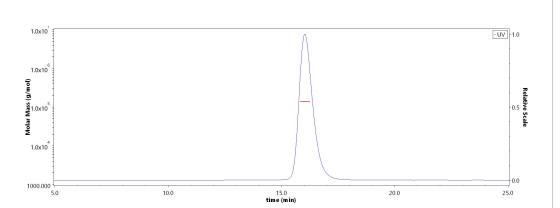
- For long term storage, the product is stable for up to 3 years at -70°C from date of receipt;
- For short term storage, the product is stable for up to 12 months at 2-8°C from date of receipt.

SDS-PAGE



Anti-SARS-CoV-2 Nucleocapsid Antibody, Chimeric mAb, Human IgG1 (AM223) 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 Anti-SARS-CoV-2 Nucleocapsid Antibody, Chimeric mAb, Human IgG1 (AM223) (Cat. No. NUN-CH15) is more than 95% and the molecular weight of this protein is around 130-160 kDa verified by SEC-MALS.



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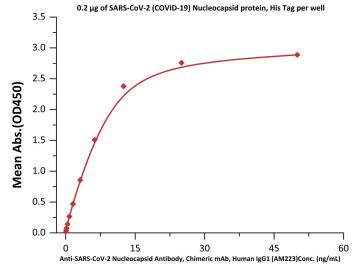
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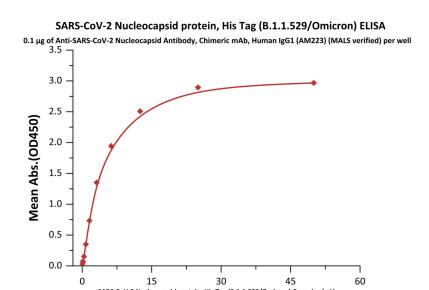
Bioactivity-Elisa

Anti-SARS-CoV-2 Nucleocapsid Antibody, Chimeric mAb, Human IgG1 (AM223) (MALS verified) ELISA



Immobilized SARS-CoV-2 (COVID-19) Nucleocapsid protein, His Tag (Cat. No. NUN-C5227) at $2\mu g/mL$ ($100\mu L/well$) can bind Anti-SARS-CoV-2 Nucleocapsid Antibody, Human IgG1 (AM223) (Cat. No. NUN-CH15) with a linear range of 0.2-6 ng/mL (Routinely tested).

Report



Immobilized Anti-SARS-CoV-2 Nucleocapsid Antibody, Human IgG1 (AM223) (Cat. No. NUN-CH15) at 1μg/mL (100μL/well) can bind SARS-CoV-2 Nucleocapsid protein, His Tag (B.1.1.529/Omicron) (Cat. No. NUN-C52Ht) with a linear range of 0.2-6 ng/mL (Routinely tested).

Background

Nucleocapsid (N) protein is the most abundant protein found in coronavirus. CoV N protein is a highly immunogenic phosphoprotein important for viral genome replication and modulation of cell signaling pathways. It was first identified by a research team while they were screening for ADP-ribosylated proteins during coronavirus (CoV) infection (Grunewald M. E., et al. 2017, Virology; 517: 62-68). The array of diverse functional activities accommodated in N protein makes it more than a structural protein but also an interesting target in the development of antiviral therapeutics. Because of the conservation of N protein sequence and its strong immunogenicity, N protein of coronavirus is chosen as a diagnostic tool.

Clinical and Translational Updates

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

