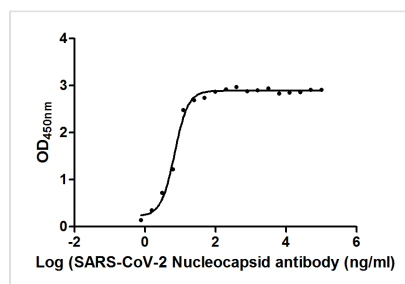




N Recombinant Monoclonal Antibody

Product Code	CSB-RA33255A0GMY
Abbreviation	N
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P0DTC9
Immunogen	Recombinant Human Novel Coronavirus Nucleoprotein (N) (1-419aa)(CSB-EP3325GMY)
Species Reactivity	Human Novel Coronavirus (SARS-CoV-2/ 2019-nCoV)
Tested Applications	ELISA, GICA; Recommended dilution: ELISA:1:10000-1:50000, GICA:1:500-1:2000
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, pH 7.4
Purification Method	Affinity-chromatography
Isotype	Monoclonal mouse (variable region)/human (kappa/IgG1 constant)chimeric antibody
Clonality	Monoclonal
Alias	Nucleocapsid protein, NC, protein N, N
Immunogen Species	Human Novel Coronavirus (SARS-CoV-2/ 2019-nCoV)
Research Area	Microbiology
Gene Names	N (Nucleoprotein)
Clone No.	1A6

Image

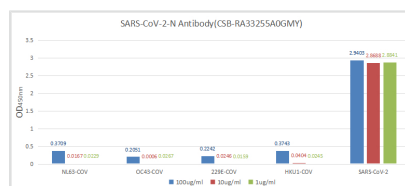


The Binding Activity of SARS-CoV-2-N Antibody with SARS-CoV-2-N

Activity: Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV-2-N (CSB-EP3325GMY) at 2 µg/ml can bind SARS-CoV-2-N Antibody, the EC₅₀ is 6.892 ng/ml.



In the Colloidal Gold Immunochromatography Assay detection system, the background of antibody (CSB-RA33255A0GMY) is clean, the detection limit can be as low as 446.4ng/ml (31.25ng/0.07ml), and the sensitivity is very good.



ELISA: Immobilize various types of SARS proteins at concentration of 2µg/ml on solid substrate, then react with SARS-CoV-2-N Antibody at concentration of 100µg/ml, 10µg/ml and 1µg/ml. It shows the SARS-CoV-2-N Antibody (CSB-RA33255A0GMY) is specific for SARS-CoV-2-N protein, without any cross-reactivity with NL63-CoV, HCoV-OC43, HCoV-229E or HCoV-HKU1.

Description

The recombinant N antibody was prepared by obtaining the antibody genes, cloning the genes into a plasma vector to construct vector clone, transfecting the vector clone into a mammalian cell line for transient expression, and purifying the antibody by affinity-chromatography. This recombinant N antibody has been verified to detect the N protein from Human Novel Coronavirus (SARS-CoV-2/ 2019-nCoV) in the ELISA, GICA.

SARS-CoV-2 N protein, a highly immunogenic viral protein, is encoded by the ninth ORF of the virus. It is involved in viral assembly, replication, and host immune response regulation. The N protein recognizes and binds to RNA, allowing for genome encapsidation and participating in the assembly of the virion through its interactions with the membrane protein M. It is an immunodominant antigen in host immune responses that can be used as a diagnostic antigen and immunogen. The N protein is more sensitive than the S protein in response to adaptive immunity, making it a better indicator of early disease.