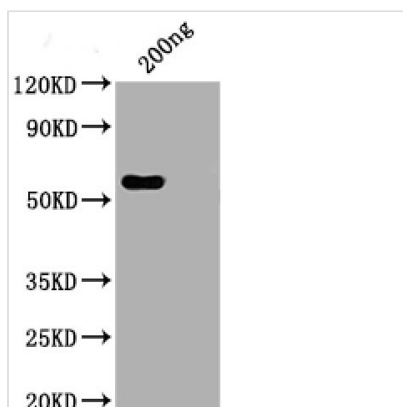




# N Recombinant Monoclonal Antibody

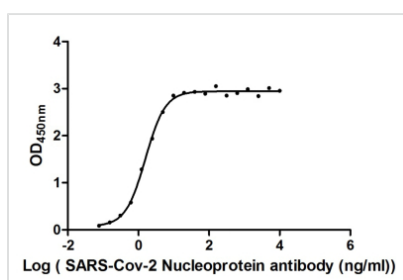
<b>Product Code</b>	CSB-RA33255A1GMY
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	P0DTC9
<b>Immunogen</b>	Recombinant Human Novel Coronavirus Nucleoprotein (N) (1-419aa) (CSB-EP3325GMY)
<b>Species Reactivity</b>	Human Novel Coronavirus (SARS-CoV-2/ 2019-nCoV)
<b>Tested Applications</b>	ELISA, WB, GICA; Recommended dilution: ELISA:1:10000-1:50000, WB:1:500-1:5000, GICA:1:1000-1:10000
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, pH 7.4
<b>Purification Method</b>	Affinity-chromatography
<b>Isotype</b>	Mouse scFv fusion with human IgG1 Fc
<b>Clonality</b>	Monoclonal
<b>Product Type</b>	Recombinant Antibody
<b>Immunogen Species</b>	Human Novel Coronavirus (SARS-CoV-2/ 2019-nCoV)
<b>Research Area</b>	Microbiology
<b>Clone No.</b>	1A6

## Image



### Western Blot

Positive WB detected in: His tag-tagged SARS-CoV-2 nucleocapsid recombinant protein from E. Coli (CSB-EP3325GMY)  
SARS-CoV-2 nucleocapsid antibody at 1:1000 (CSB-RA33255A1GMY)  
Secondary  
Peroxidase-Affinipure Goat Anti-Human IgG Fc Fragment Specific at 1/20000 dilution  
Predicted band size: 48 kDa  
Observed band size: 55 kDa

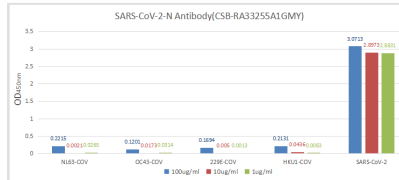


### The Binding Activity of SARS-CoV-2-N Antibody with SARS-CoV-2-N

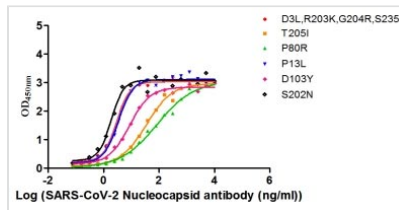
Activity: Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV-2-N at 2 µg/ml can bind SARS-CoV-2-N Antibody, the EC<sub>50</sub> is 1.586 ng/ml.



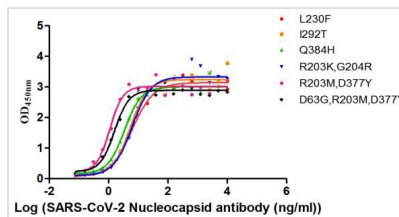
In the Colloidal Gold Immunochromatography Assay detection system, the background of antibody (CSB-RA33255A1GMY) is clean, the detection limit can be as low as 125ng/ml (8.75ng/0.07ml), and the sensitivity is very good.



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-RA33255A1GMY) is specific for SARS-CoV-2-N protein, without any cross-reactivity with NL63-CoV, HCoV-OC43, HCoV-229E or HCoV-HKU1.



The Binding Activity of N protein with N Recombinant Antibody. Activity: Measured by its binding ability in a functional ELISA. Immobilized N at 2 µg/ml can bind N Recombinant Antibody, the EC<sub>50</sub> of N Recombinant Antibody.



The Binding Activity of N protein with N Recombinant Antibody. Activity: Measured by its binding ability in a functional ELISA. Immobilized N at 2 µg/ml can bind N Recombinant Antibody, the EC<sub>50</sub> of N Recombinant Antibody.

Protein Code	Variants	EC50 (ng/mL)
CSB-EP33255A1GMY (M1)	D3L_R203K_G204R_S235F	2.562-3.421
CSB-EP33255A1GMY (M2)	T205I	29.34-40.67
CSB-EP33255A1GMY (M3)	P80R	63.76-113.6
CSB-EP33255A1GMY (M4)	P13L	2.825-4.124
CSB-EP33255A1GMY (M5)	D103Y	7.358-9.976
CSB-EP33255A1GMY (M8)	S202N	1.466-2.382
CSB-EP33255A1GMY (M9)	L230F	4.854-7.721
CSB-EP33255A1GMY (M10)	I292T	3.859-7.358
CSB-EP33255A1GMY (M11)	Q384H	2.785-4.100
CSB-EP33255A1GMY (M12)	R203K_G204R	4.664-8.256
CSB-EP33255A1GMY (M13)	R203M_D377Y	0.8488-1.385
CSB-EP33255A1GMY (M14)	D63G_R203M_D377Y	1.304-1.875

The Binding Activity of N protein with N Recombinant Antibody. Activity: Measured by its binding ability in a functional ELISA. Immobilized N at 2 µg/ml can bind N Recombinant Antibody, the EC<sub>50</sub> of N Recombinant Antibody.

## Description

Recombinant anti-SARS-CoV-2 Nucleoprotein (N protein) Mouse single-chain variable fragment (ScFv) is expressed from 293 cells (HEK293) with a human IgG1 Fc tag on C-terminal. The resulting product is the recombinant SARS-CoV-2 N monoclonal antibody. This N antibody is recommended for ELISA, WB, and GICA applications. It has undergone affinity-chromatography purification. And it can detect the endogenous content of human SARS-Cov-2 N protein.

The SARS-CoV-2 N protein is an abundant RNA-binding protein. It contains two structured domains: the RNA binding domain and the oligomerization domain, which are separated by a long flexible linker. The separated domains allow the N protein to execute many functions in the viral lifecycle such as RNA



replication, virion assembly, and immune system interference.