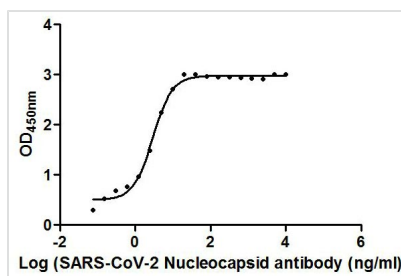




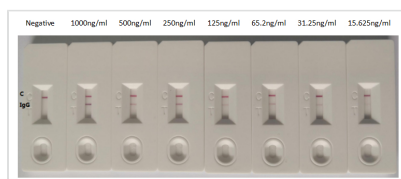
N Recombinant Monoclonal Antibody

Product Code	CSB-RA33255A2GMY
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:1:500-1:5000
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	Mouse scFv fusion with human IgG1 Fc
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Human Novel Coronavirus (SARS-CoV-2/ 2019-nCoV)
Research Area	Microbiology
Clone No.	4D2

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 at 2 µg/ml can bind SARS-CoV-2-N Antibody, the EC₅₀ is 2.928 ng/ml.



In the Colloidal Gold Immunochromatography Assay detection system, the background of antibody (CSB-RA33255A2GMY) is clean, the detection limit can be as low as 15.625ng/ml (1.09ng/0.07ml), and the sensitivity is very good.

Description

The generation of the N recombinant monoclonal antibody involves a rigorous process to ensure its exceptional quality and specificity. Firstly, B cells are



isolated from the spleen of an immunized animal, with the recombinant human SARS-CoV-2 N protein (1-419aa) used as the immunogen. RNA is extracted from the B cells and converted into cDNA through reverse transcription. The N antibody genes are then amplified using specific primers designed for the antibody constant regions and cloned into an expression vector. The human IgG1 Fc is inserted into the vector, downstream of the N antibody. This recombinant vector is transfected into host cells to enable the production of the N recombinant monoclonal antibody. After a period of cell culture, the antibody is collected from the cell culture supernatant and purified using affinity chromatography, resulting in a highly purified form suitable for various applications. To ensure its quality and functionality, the antibody undergoes thorough characterization through assays including ELISA and GICA which validate its specificity and ability to detect human SARS-CoV-2 N protein. The meticulous production process guarantees the development of a reliable and effective N recombinant monoclonal antibody, essential for a wide range of human SARS-CoV-2-related research.