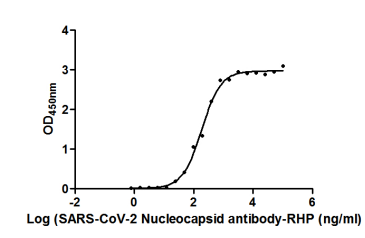
N Recombinant Monoclonal Antibody, HRP conjugated

Product Code	CSB-RA33255B1GMY
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
Form	Liquid
Conjugate	HRP
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
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-N Antibody, HRP conjugated 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, HRP conjugated, the EC_{50} is 188.35 ng/ml.

Description

The production of the N recombinant monoclonal antibody involves a systematic process to ensure its high quality and specific binding properties. The journey begins by isolating B cells from the spleen of an immunized animal, where the recombinant human SARS-CoV-2 N protein (1-419aa) is used as the immunogen. RNA is then extracted from these B cells and converted into cDNA through reverse transcription. The N antibody genes are 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 gene and the HRP is also incorporated into the vector. This recombinant vector is introduced into host cells through transfection, allowing for the production of the N recombinant monoclonal antibody. After an appropriate incubation period, the antibody is collected from the cell culture supernatant and purified using affinity chromatography to ensure a highly pure form. The purified N recombinant monoclonal antibody is characterized using ELISA analysis to validate its specificity and functionality in detecting human SARS-CoV-2 N protein. Through this comprehensive production process, a reliable and effective N recombinant monoclonal antibody is generated, making it an invaluable tool for various SARS-CoV-2-associated research.