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N Recombinant Monoclonal Antibody, Biotin conjugated

Product Code	CSB-RA33255D1GMY
Abbreviation	Ν
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)
Species Reactivity	Human Novel Coronavirus (SARS-CoV-2/ 2019-nCoV)
Tested Applications	ELISA
Form	Liquid
Conjugate	Biotin
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

Description

The production of the N recombinant monoclonal antibody is carried out through a systematic and thorough process to ensure its quality and specificity. 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 utilized as the immunogen. The RNA is then extracted from these B cells and converted into cDNA through reverse transcription. Using specific primers designed for the antibody constant regions, the N antibody genes are amplified and inserted into an expression vector. The human IgG1 Fc is integrated into the vector, downstream of the N antibody gene. The biotin is also inserted into the vector. The recombinant vector is then introduced into host cells through transfection, enabling the production of the N recombinant monoclonal antibody. Following an appropriate incubation period, the antibody is collected from the cell culture supernatant and subjected to purification using affinity chromatography, ensuring a high level of purity. To validate its specificity and functionality in detecting human SARS-CoV-2 N protein, the purified N recombinant monoclonal antibody undergoes rigorous characterization through ELISA. This meticulous



production process yields a reliable and effective N recombinant monoclonal antibody, serving as a valuable tool in various research related to SARS-CoV-2.