

Anti-SARS-CoV-2 nucleocapsid [mBG86] Standard Size Ab02383-15.0

This antibody does not have a J-chain and therefore presents as a hexamer, rather than a pentamer.

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgM, Kappa

Clone Number: mBG86

Alternative Name(s) of Target: NP; nucleoprotein; NC; Protein N; Nucleocapsid protein; SARS-CoV-2 Protein N; SARS-CoV-2 Nucleocapsid protein; SARS Coronavirus; SARS-CoV-2; SARS CoV 2; 2019-nCoV; 86

UniProt Accession Number of Target Protein: P0DTC9

Published Application(s): WB, ELISA, IF

Published Species Reactivity: SARS-CoV-2

Immunogen: The original mouse IgG1 version of this antibody was raised by immunizing BALB/c mice with a recombinant SARS-Cov-2 N protein corresponding to AA133-419.

Specificity: mBG86 is specific to SARS-CoV-2 N protein and does not react with the SARS-CoV N protein or other similar N proteins (such as MERS-CoV, HuCoV-OC43, HuCoV-NL63, HuCoV-HKU1 and HuCoV-229E N). Western blot analysis with truncated fragments of N protein suggested that its epitope resides in AA133-179.

Application Notes: Specificity of the original mouse IgG1 version of this antibody to SARS-CoV-2 was confirmed by ELISA (Terry et al., 2021; pmid: 33714753). mBG86 is a particularly useful antibody as it can be used to detect SARS-Cov-2 N protein and differentiate it from SARS-CoV. Western blot analysis demonstrated that this antibody exhibits two band labeling, suggesting a specificity for conformational epitopes on the N protein (Terry et al., 2021; pmid: 33714753). This antibody was shown to detect SARS-CoV-2 N protein in methanol-stained Vero cells by immunofluorescence (Terry et al., 2021; pmid: 33714753). Finally, the original version of mBG86 was demonstrated to be an effective detection antibody in a sandwich ELISA assay suggesting it's potential use in SARS-Cov-2 diagnostics (Terry et al., 2021; pmid: 33714753).

Antibody First Published in: Terry et al. Development of SARS-CoV-2 Nucleocapsid Specific Monoclonal Antibodies Terry JS, Anderson LB, Scherman MS, McAlister CE, Perera R, Schountz T, Geiss BJ. Development of a SARS-CoV-2 nucleocapsid specific monoclonal antibody. *Virology*. 2021 Jun;558:28-37.

[PMID:33714753](#)

Note on publication: Describes the generation and characterization of novel anti-SARS-CoV-2 N protein antibodies.

Product Form

Size: 50 µg Purified antibody.

Purification: Affinity Purified using a recombinant lectin column

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note - This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.