

Anti-SARS-CoV-2 nucleocapsid [mBG86] Standard Size Ab02383-10.7

This antibody is in our proprietary AbFab2™ recombinant F(ab2) format - based on Human IgG1 sequence with a short dimerization domain to improve stability and a his tag.

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 F(ab)2, AbFab2™ His-Tagged, 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: 100 µg Purified antibody.

Purification: Purified by Immobilized Metal Affinity Chromatography

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.