

## Anti-SARS-CoV-2 and SARS-CoV nucleocapsid [mBG17] Standard Size Ab02382-10.27

This is a Fab fragment with no tags.

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 Fab fragment, Kappa

Clone Number: mBG17

**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; 17;

SARS-CoV nucleocapsid

**UniProt Accession Number of Target Protein: P0DTC9** 

Published Application(s): WB, ELISA, IF

Published Species Reactivity: SARS-CoV, 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:** mBG17 strongly recognizes SARS-CoV-2 N protein and SARS-CoV N protein. To lesser extent, it cross-reacts with the HuNL63 N protein. Western blot analysis with truncated fragments of N protein suggested that its epitope resides in AA381-419 at the C-terminal.

**Application Notes:** Specificty of the original mouse IgG1 version of this antibody to SARS-CoV-2 and SARS-Cov was confirmed by Specificty of the original mouse IgG1 version of this antibody to SARS-CoV-2 and SARS-Cov was confirmed by ELISA (Terry et al., 2021; pmid: 33714753). This antibody detected SARS-Cov-2 N protein in Western blot exhibiting labeling patterns suggesting a linear epitope (Terry et al., 2021; pmid: 33714753). mBG17 was shown to be very effective in staining SARS-Cov-2 N protein in immunofluorescence in SARS-Cov-2-infected Vero cells, both methanol and paraformaldehyde fixed (Terry et al., 2021; pmid: 33714753). Finally, the original version of mBG17 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.