

## Anti-SARS-CoV-2 and SARS-CoV nucleocapsid [mBG17] Standard Size Ab02382-1.7

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

This reformatted mouse 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:** Mouse F(ab)2, AbFab2™ His-Tagged, 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:** Specificity of the original mouse IgG1 version of this antibody to SARS-CoV-2 and SARS-Cov was confirmed by Specificity 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.