Anti-SARS-CoV-2 and SARS-CoV nucleocapsid [mBG17] Bulk Size Ab02382-10.3-BT

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

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 IgG1, Fc Silent™, 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: 1 mg Purified antibody in bulk size.
Purification: Protein A affinity purified
Supplied In: PBS only.
Storage Recommendation: Store at 4ºC for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommed this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20ºC.
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.