

Anti-NP [JS16] Bulk Size Ab03061-3.3-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 mouse antibody was made using the variable domain sequences of the original Human Fab format for improved compatibility with existing reagents assays and techniques.

Isotype and Format: Mouse IgG2b, [Fc Silent™](#), Lambda

Clone Number: JS16

Alternative Name(s) of Target: N; Nucleoprotein; Nucleocapsid protein; NC; Protein N

UniProt Accession Number of Target Protein: P0DTC9

Published Application(s): SPR, WB, ELISA

Published Species Reactivity: SARS-CoV-2

Immunogen: A combinatorial fragment of antigen-binding (Fab)antibody phage library based on peripheral blood-derived from five coronavirus disease 2019 (COVID-19) infected donors was constructed. The Fab antibody was obtained and identified by panning with purified NP.

Specificity: The antibody binds the nucleocapsid protein of SARS-CoV-2.

Application Notes: The specificity of the Fab and the IgG1 formats for SARS-CoV-2 NP was confirmed by ELISA analysis. The IgG1 antibody detected SARA-Cov-2 NP by western blot. Surface plasmon resonance assay was performed to evaluate the binding specificity and affinity between antibody and purified NP; the antibody showed a tight binding affinity to immobilized NP. The antibody was used as a capture antibody in sandwich ELISA, where it was used in a matched pair in conjunction with JS08, with the optimal detection limit below 0.78ng/mL. The epitope of the antibody was analyzed by competition ELISA (Zhang et al, 2020; pmid:33281824).

Antibody First Published in: Zhang et al. Development of Patient-Derived Human Monoclonal Antibodies Against Nucleocapsid Protein of Severe Acute Respiratory Syndrome Coronavirus 2 for Coronavirus Disease 2019 Diagnosis Front Immunol. 2020 Nov 13;11:595970. [PMID:33281824](#)

Note on publication: The paper describes the generation and characterization of the antibody, and its application for SARS-CoV-2 diagnosis.

Product Form

Size:

1 mg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. 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.