

Anti-NP [JS16] Standard Size Ab03061-15.0

This antibody does not have a J-chain and therefore presents as a hexamer, rather than a pentamer.

This reformatted human 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: Human IgM, 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: 50 µg Purified antibody.

Purification:

Affinity Purified using a recombinant lectin column

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.