

Monoclonal Anti-SARS-Related Coronavirus 2 Spike Glycoprotein Receptor Binding Domain (RBD), Omicron Cross-Reactive (produced *in vitro*)

Catalog No. NR-56466
Sino Biological Catalog No. 40592-MM117

For research use only. Not for use in humans.

Contributor and Manufacturer:

Sino Biological, Wayne, Pennsylvania, USA

Product Description:

Antibody Class: IgG1

Mouse monoclonal antibody prepared against the fusion protein containing the severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2) spike (S) glycoprotein receptor binding domain (RBD) (R319 to F541; numbering according to GenPept: [YP_009724390](#)) and mouse IgG Fc (mFc) domain was purified from hybridoma supernatant by protein A affinity chromatography. The B cell hybridoma was generated by the fusion of mouse myeloma cells with splenocytes from mice immunized with recombinant SARS-CoV-2 spike RBD-mFc fusion protein (Sino Biological 40592-V05H).¹

Material Provided:

Each vial of NR-56466 contains approximately 50 µg of purified monoclonal antibody in phosphate buffered saline (PBS). The concentration, expressed as mg/mL, is shown on the Certificate of Analysis.

Packaging/Storage:

NR-56466 was packaged aseptically in screw-capped plastic vials and is provided frozen on dry ice. The product should be stored at -20°C to -80°C immediately upon arrival. NR-56466 can be stored at 2°C to 8°C for one month without detectable activity loss. Freeze-thaw cycles should be avoided.

Functional Activity:

NR-56466 is specific to the SARS-CoV-2 Spike RBD-mFc recombinant protein (Sino Biological 40592-V05H) as shown in ELISA, with cross-reactivity to the SARS-CoV-2 Spike RBD protein (Omicron variant; Sino Biological 40592-V49H7-B), SARS-CoV-2 spike RBD protein (Delta variant; Sino Biological 40592-V49H1-B) and SARS-CoV-2 spike RBD protein [wildtype (WT), no variants; Sino Biological 40592-V08H, 40592-V27H-B]. NR-56466 is functional in *in vitro* neutralization assays with SARS-CoV-2 Spike Pseudovirus (WT; Sino Biological PSV001) and SARS-CoV-2 Spike Omicron (B.1.1.529) Pseudovirus (Sino Biological PSV016), but not with SARS-CoV-2 Delta (B.1.617.2) variant Spike Pseudovirus (Sino Biological PSV011).

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH:

Monoclonal Anti-SARS-Related Coronavirus 2 Spike Glycoprotein Receptor Binding Domain (RBD), Omicron Cross-Reactive (produced *in vitro*), NR-56466."

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. [Biosafety in Microbiological and Biomedical Laboratories \(BMBL\)](#). 6th ed. Washington, DC: U.S. Government Printing Office, 2020.

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References:

1. Lu, Z., Personal Communication.

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