

Monoclonal Anti-SARS-Related Coronavirus 2 Spike Glycoprotein Receptor Binding Domain (RBD), Native Antigen, Clone 34.2.2 (produced *in vitro*)

Catalog No. NR-58912

For research use only. Not for use in humans.

Contributor and Manufacturer:
BEI Resources

Product Description:

Antibody Class: IgG1k
Mouse monoclonal antibody against the severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2) Wuhan-Hu-1 spike glycoprotein receptor binding domain (RBD) was purified from hybridoma clone 34.2.2 culture supernatant by protein G affinity chromatography (Figure 1). The B cell hybridoma was generated by the fusion of Sp2/0-Ag14 mouse myeloma cells with splenocytes from BALB/c mice immunized with recombinant purified native RBD antigen and subsequent clonal selection. The recombinant antigen was produced *in vitro* by transfecting 293F cells with the RBD expression vector (BEI Resources [NR-52309](#)).

Material Provided:

Each vial of NR-58912 contains approximately 100 µL of purified monoclonal antibody in PBS. The concentration, expressed as mg/mL, is shown on the Certificate of Analysis.

Packaging/Storage:

NR-58912 was packaged aseptically in screw-capped plastic vials and is provided frozen on dry ice. The product should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be avoided.

Functional Activity:

NR-58912 is specific to the SARS-CoV-2 RBD protein and shows cross-reactivity with SARS-CoV-2 spike-D 614G but not the SARS-CoV-1 spike protein (BEI Resources [NR-623](#)) or MERS-CoV spike protein (BEI Resources [NR-53591](#)). NR-58912 has a relatively low affinity to the SARS-CoV-2 RBD and SARS-CoV-2-Spike-D614G proteins. Neutralization capabilities of this antibody was measured through a pseudotyped SARS-CoV-2 S lentiviral particle-based assay, which resulted in IC50 values of 914.3 ng/mL.

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), Native Antigen, Clone 34.2.2 (produced *in vitro*), NR-58912."

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.

Disclaimers:

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Figure 1: Representative SDS-PAGE

