

Monoclonal Anti-SARS Coronavirus Recombinant Human IgG1, Clone CR3022 (produced in *Nicotiana benthamiana*)

Catalog No. NR-52392

This reagent is the property of the U.S. Government.

Product Description:

Antibody Class: IgG1

Human monoclonal antibody CR3022 was prepared via an immune phage display library, constructed from lymphocytes of a convalescent severe acute respiratory syndrome coronavirus (SARS-CoV) patient. CR3022 is a neutralizing antibody that targets the receptor binding domain (RBD) of the spike (S) glycoprotein of SARS-CoV. NR-52392 was produced in *Nicotiana benthamiana* tobacco plants using a transient plant expression system and purified by protein A chromatography.

Lot: 70044758

Manufacturing Date: 15OCT2020

TEST	SPECIFICATIONS	RESULTS
SDS-PAGE Analysis (Coomassie blue staining) (Figure 1)	Protein band of interest represents > 90% of total staining intensity Correct molecular weight (MW) for assembled antibody (non-reduced) and heavy and light chains (reduced)	Dominant band of ~ 156 kDa accounting for > 90% of total staining intensity Correct molecular weight (MW) for assembled antibody (non-reduced) and heavy and light chains (reduced)
Concentration by Bicinchoninic Acid Assay Bovine Gamma Globulin (standard)	≥ 1.0 mg per mL	1.0 mg per mL
Functional Activity Fluorescent western blot analysis ELISA	Reactive Report results	Reactive (Figure 2) ¹ Reactive (Figure 3) ²
Filtration	0.2 µm filter-sterilized	0.2 µm filter-sterilized
Sterility	No growth in Brain Heart Infusion	No growth in Brain Heart Infusion

¹Recognizing NR-52392 under non-reduced and reduced conditions using Alexa Fluor® 488 AffiniPure Goat Anti-Human IgG, Fcγ fragment specific and Alexa Fluor® 647 AffiniPure Goat Anti-Human IgG, F(ab')₂ fragment specific (Jackson ImmunoResearch, 109-545-008 and 109-605-006, respectively) detecting heavy chain (green) and light chain (red), respectively.

²ELISA plates were coated with SARS-CoV RBD from SARS2, SARS1, Bat HKU9-10-1 (negative), Bat RaTG13 and Bat Zhejiang (negative), incubated with NR-52392 lot 70044758 (100 µL per well at 2.6 µg per mL) and detected with secondary antibody, Goat Anti-Human IgG (Jackson ImmunoResearch, 109-035-008) at a 1:10,000 dilution.

Figure 1: SDS-PAGE Analysis

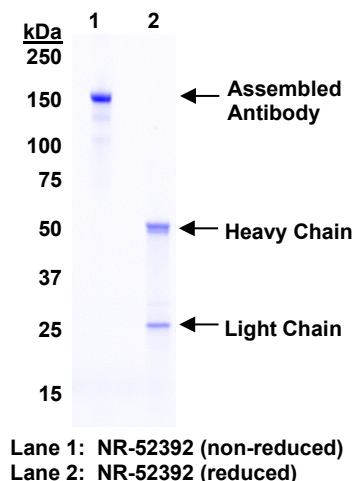


Figure 2: Fluorescent Western Blot Analysis

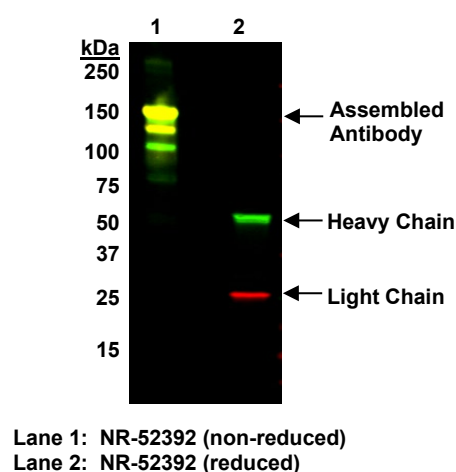
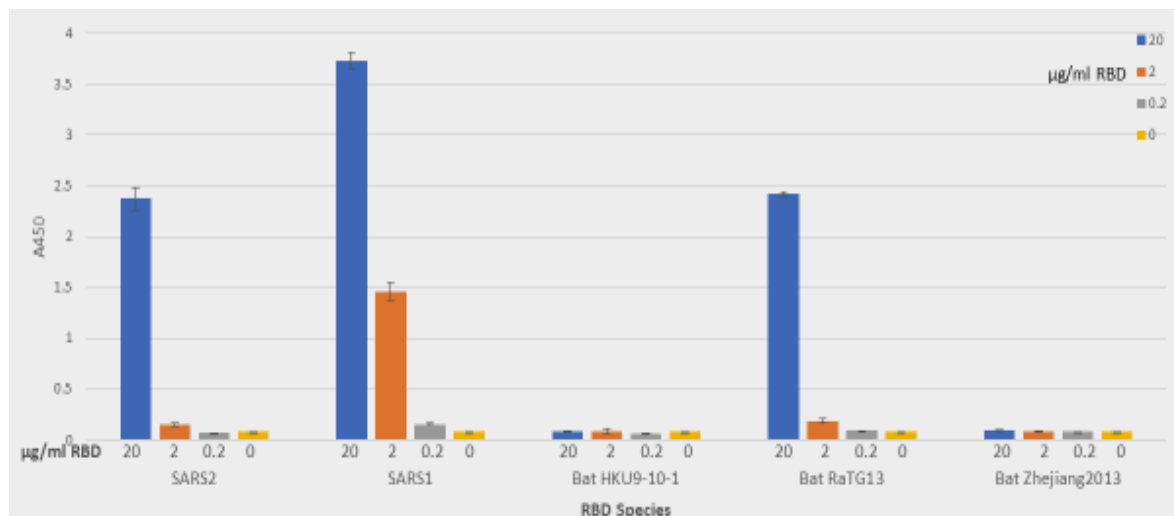


Figure 3: ELISA Analysis



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