

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

**Catalog No. NR-53876**

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-53876 was produced in *Nicotiana benthamiana* tobacco plants using a transient plant expression system and purified from the total plant homogenate using protein A chromatography.

**Lot: 70039877**

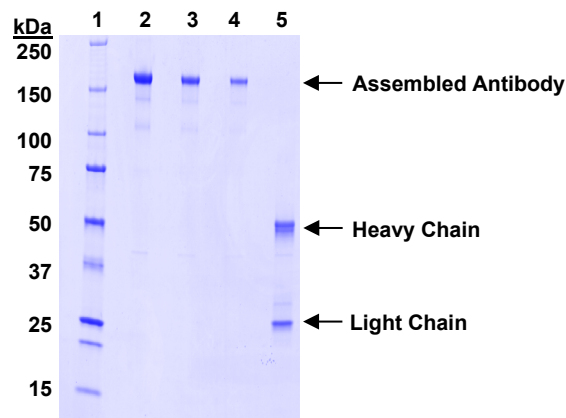
**Manufacturing Date: 30SEP2020**

TEST	SPECIFICATIONS	RESULTS
<b>SDS-PAGE Analysis (Coomassie blue densitometer)</b>	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 (Figure 1) Correct molecular weight (MW) for assembled antibody (non-reduced) and heavy and light chains (reduced) (Figure 1)
<b>Concentration by Bicinchoninic Acid Assay</b>	≥ 1.0 mg per mL	1.0 mg per mL
<b>Functional Activity</b> Western blot analysis ELISA	Reactive Report results	Reactive (Figure 2) <sup>1</sup> Reactive (Figure 3) <sup>2</sup>
<b>Sterility</b>	0.2 µm filter-sterilized	0.2 µm filter-sterilized

<sup>1</sup>Recognizing full-length SARS-CoV-2 S1 protein fused to a human IgG1 fragment crystallizable (Fc) domain, using a 0.9 µg/mL of NR-53876 as primary antibody and a 1:2500 dilution of goat anti-human IgG F(ab')<sub>2</sub> fragment-specific HRP (Jackson ImmunoResearch 109-035-006) as secondary antibody

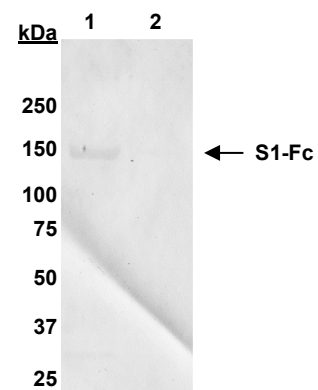
<sup>2</sup>Using histidine-tagged SARS-CoV-2 S1 RBD diluted to 20, 5, 1, or 0 µg/mL and CR30322 at 26, 260 and 2600 ng/mL

**Figure 1: SDS-PAGE Analysis**



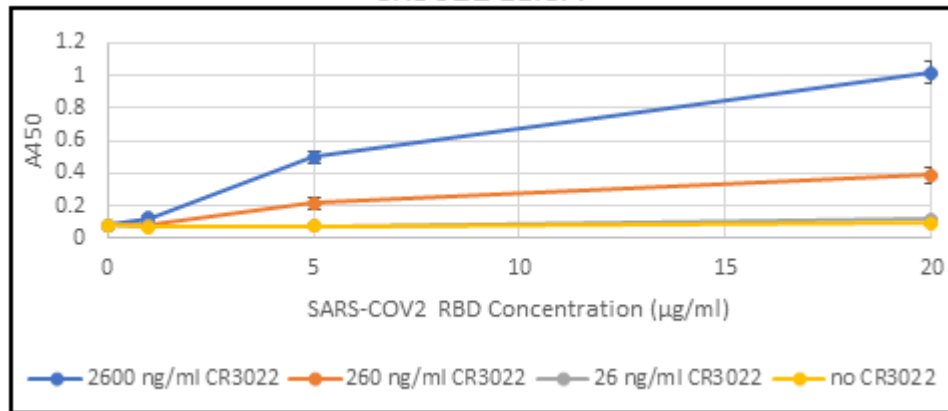
Lane 1: Molecular Weight Markers  
Lanes 2, 3, 4: NR-53876 (1.7 µg, 0.87 µg, 0.43 µg, respectively; non-reduced)  
Lane 5: NR-53876 (1.7 µg; reduced)

**Figure 2: Western Blot Analysis**



Lane 1: NR-53876 (1 µg)  
Lane 2: NR-53876 (0.1 µg)

Figure 3: ELISA Analysis



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