

# 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: 70035167

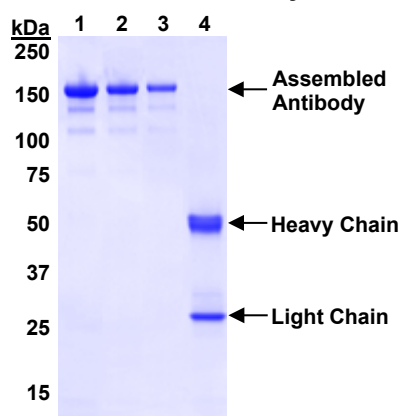
Manufacturing Date: 03APR2020

TEST	SPECIFICATIONS	RESULTS
SDS-PAGE Analysis (Coomassie blue densitometer)	Protein band of interest represents > 90% of total staining intensity	Dominant band of ~ 156 kDa accounting for > 90% of total staining intensity (Figure 1)
Agilent® Protein 230 Analysis	Correct molecular weight (MW) for assembled antibody (non-reduced) and heavy and light chains (reduced)	Correct molecular weight (MW) for assembled antibody (non-reduced) and heavy and light chains (reduced) (Figure 2)
Concentration by Spectrophotometer at OD <sub>280</sub>	≥ 1.0 mg per mL	1.04 mg per mL
Functional Activity Western blot analysis Immunofluorescence assay	Reactive Report results	Reactive (Figure 3) <sup>1</sup> Reactive (Figure 4) <sup>2</sup>
Sterility	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 1:500 dilution of NR-52392 as primary antibody and a 1:5000 dilution of goat anti-human IgG F(ab')<sub>2</sub> fragment-specific HRP (Jackson ImmunoResearch 109-035-006) as secondary antibody

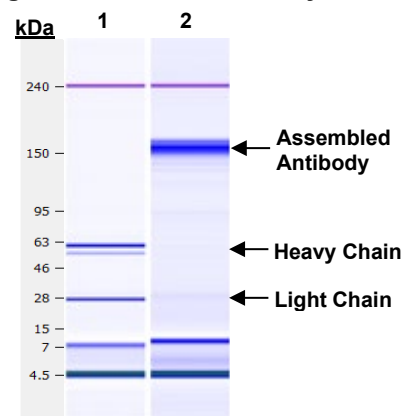
<sup>2</sup>Using severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2), isolate USA-CA2/2020 (BEI Resources NR-52387 lot 70034887)-infected *Cercopithecus aethiops* kidney cells (Vero E6; ATCC® CRL-1586™) and 1:50, 1:100 and 1:200 dilutions of NR-52392

Figure 1: SDS-PAGE Analysis



Lanes 1-3: NR-52392 (2 µg, 1 µg, 0.5 µg, respectively; non-reduced)  
Lane 4: NR-52392 (2 µg; reduced)

Figure 2: Agilent® Protein 230 Analysis



Lane 1: NR-52392 (reduced)  
Lane 2: NR-52392 (non-reduced)

Figure 3: Western Blot Analysis

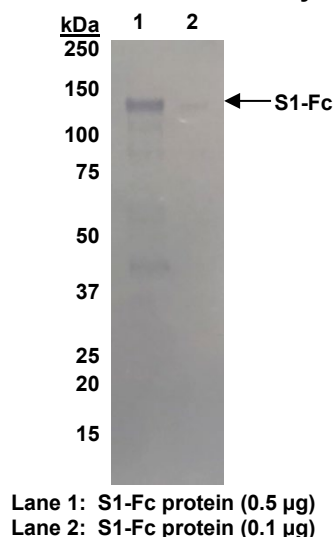
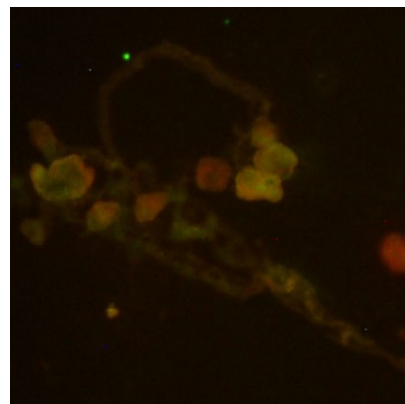


Figure 4: Indirect Fluorescent Antibody Assay



/Heather Couch/  
Heather Couch

Program Manager or designee, ATCC Federal Solutions

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