

**Spike Glycoprotein (Stabilized) from SARS-Related Coronavirus 2, Wuhan-Hu-1 with C-Terminal Histidine and Twin-Strep® Tags, Recombinant from HEK293 Cells**

**Catalog No. NR-53589**

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

**Product Description:**

A recombinant form of the spike (S) glycoprotein from severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2), Wuhan-Hu-1 (GenPept: [QHD43416](#)) was produced by transient transfection of a previously published construct (VRC7471) into human embryonic kidney HEK293 (Freestyle 293F) cells and purified by immobilized metal affinity (Ni-NTA) and gel filtration (16/600 Superdex 200) chromatography. NR-53589 lacks the native signal sequence and contains 1194 residues (ectodomain) of the SARS-CoV-2 S glycoprotein; the recombinant protein was stabilized by substitution at the furin S1/S2 cleavage site (RRAR→GSAS; residues 682 to 685) and KV→PP mutations (residues 986 and 987), and includes a T4 foldon trimerization domain, HRV3C protease cleavage site, and C-terminal octa-histidine and Twin-Strep® tags.

**Lot: 70038005**

**Manufacturing Date: 20JUL2020**

TEST	SPECIFICATIONS	RESULTS
<b>Appearance</b>	Report results	Clear
<b>Purity</b> Analytical Fast Protein Liquid Chromatography (FPLC)	Report results	Peak observed at expected retention time (Figure 1)
<b>Protein Concentration (A<sub>280</sub>)</b>	Report results	0.25 mg per mL
<b>Final Product</b> Amount per vial Volume per vial	Report results Report results	25 µg 100 µL
<b>Functional Activity</b> ELISA <sup>1</sup>	Report results	Reactive (Figure 2)

<sup>1</sup>Using SARS-CoV-2 (2019-nCoV) Spike S1 Antibody, Rabbit MAb (Sino Biological catalog number 40150-R007)

**Figure 1: Analytical FPLC**

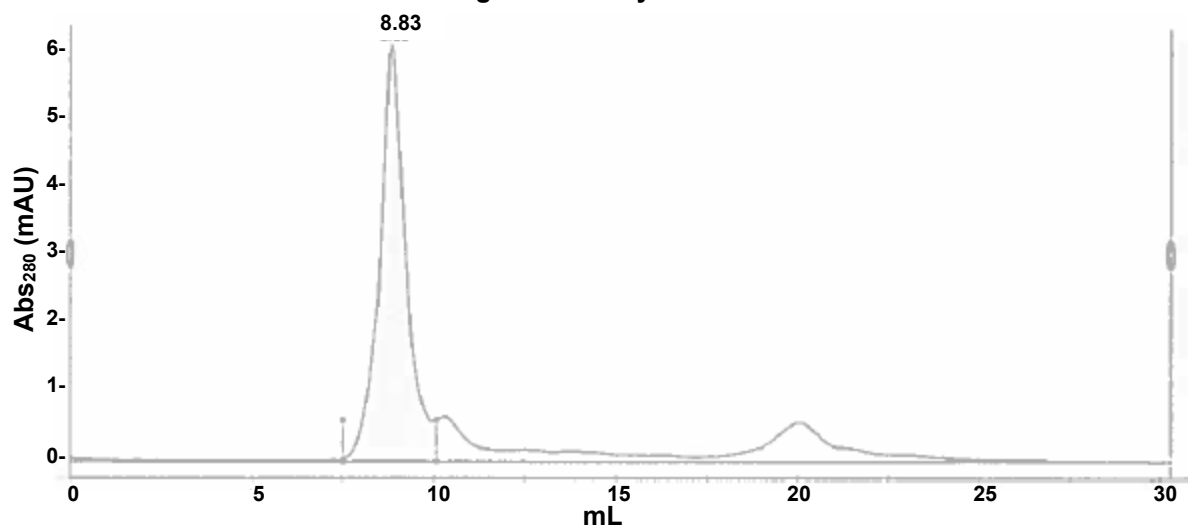
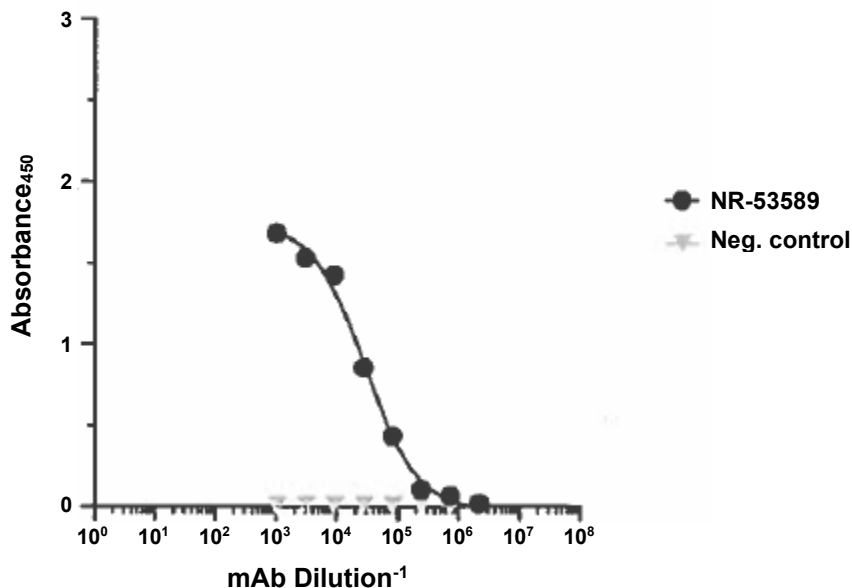


Figure 2: ELISA



/Heather Couch/  
Heather Couch

Program Manager or designee, ATCC Federal Solutions

31 AUG 2020

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected by the contributor to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

ATCC® is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

