

Spike Glycoprotein Receptor Binding Domain (RBD) from SARS-Related Coronavirus 2, Wuhan-Hu-1 with C-Terminal Histidine Tag, Recombinant from HEK293 Cells

Catalog No. NR-53800

Sino Biological Catalog No. 40592-V08H

Product Description:

A recombinant form of the spike glycoprotein receptor binding domain (RBD) from severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2), Wuhan-Hu-1 (GenPept: [YP_009724390](#)) was produced by transfection in human embryonic kidney HEK293 cells and purified. NR-53800 lacks the signal sequence, contains 223 residues of the SARS-CoV-2 spike glycoprotein RBD (amino acid residues R319 to F541) and features a C-terminal poly-histidine tag.

Lot: MA15NO0801

Manufacturing Date: 08NOV2021

TEST	SPECIFICATIONS	RESULTS
Appearance	Transparent liquid, free of foreign material	Transparent liquid, free of foreign material
Purity SDS-PAGE and Quantitative Densitometry SEC-HPLC	Target protein band(s) > 95 ± 3% Target protein band(s) > 95%	Target protein band(s) 98.6% (Figure 1) ¹ Target protein band(s) > 95% (Figure 2)
Concentration (A ₂₈₀)	Report results	2.31 mg per mL
Final Product ² Amount per vial Volume per vial	Report results Report results	50 µg 22 µL
Functional ELISA	Positive	Positive (Figure 3)
pH	7.4 ± 0.5	7.4 ± 0.5
Endotoxin Content (Limulus Amoebocyte Lysate Assay)	< 1 EU per µg	< 1 EU per µg

¹The recombinant protein migrated to a slightly larger size than was expected, likely caused by glycosylation common in recombinant spike proteins derived from coronaviruses. For more information, please see Chakraborti, S., et al. "The SARS Coronavirus S Glycoprotein Receptor Binding Domain: Fine Mapping and Functional Characterization." *Virology* 2 (2005): 73. PubMed: 16122388.

²Note: The vial should be centrifuged prior to opening.

Figure 1: SDS-PAGE

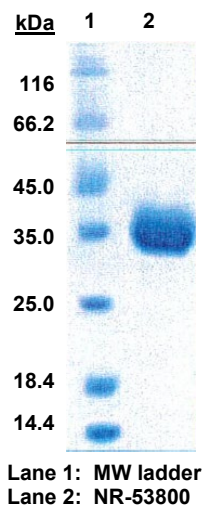


Figure 2: SEC-HPLC

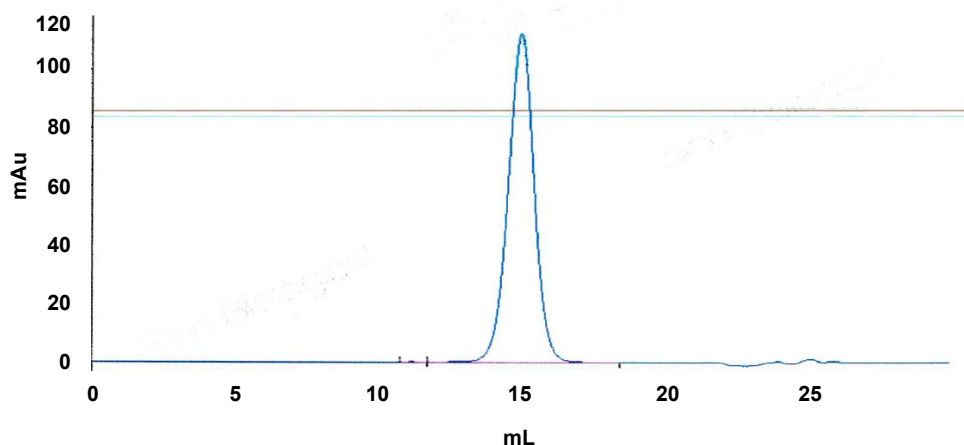
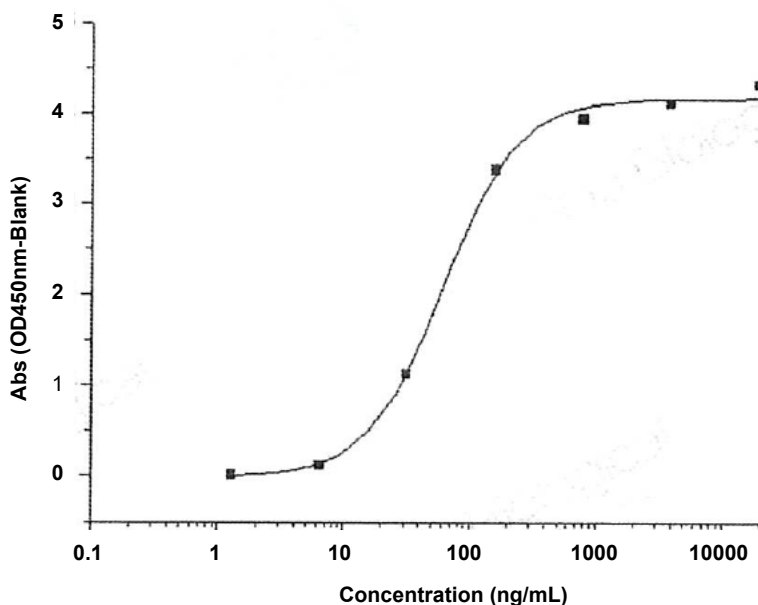


Figure 3: Functional ELISA



/Sonia Bjorum Brower/
Sonia Bjorum Brower

26 AUG 2022

Technical Manager or designee, ATCC Federal Solutions

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.

