

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](https://www.ncbi.nlm.nih.gov/nuccore/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.

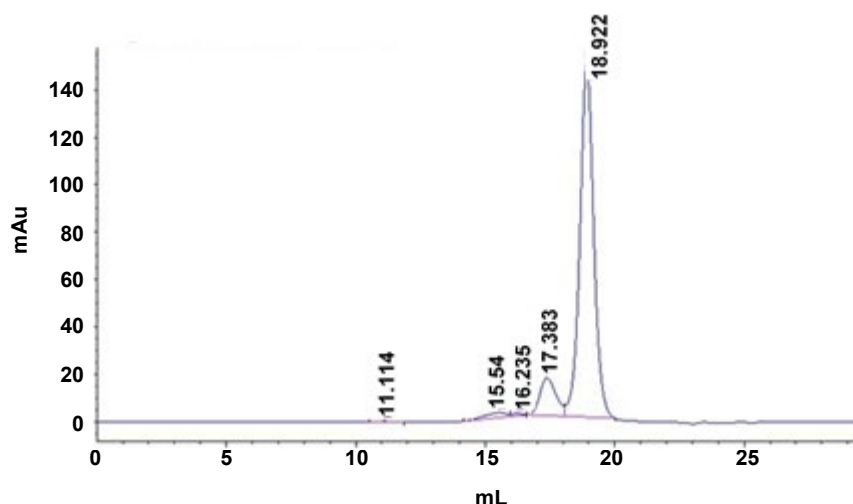
Lot: MA14MA1904

Manufacturing Date: 19MAY2020

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) 96.40% ¹ Target protein band(s) > 95% (Figure 1)
Concentration (A₂₈₀)	Report results	1.69 mg per mL
Final Product Amount per vial Volume per vial	Report results Report results	50 µg 30 µL
Functional ELISA	Positive	Positive
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.

Figure 1: SEC-HPLC



Certificate of Analysis for NR-53800**/Heather Couch/****Heather Couch**

25 SEP 2020

Program Manager or designee, ATCC Federal Solutions

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