

Spike Glycoprotein S1 Domain from SARS-Related Coronavirus 2, Wuhan-Hu-1 with C-Terminal Histidine Tag, Recombinant from HEK293 Cells

Catalog No. NR-53798

Sino Biological Catalog No. 40591-V08H

Product Description:

A recombinant form of the spike glycoprotein S1 domain 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-53798 lacks the signal sequence, contains 670 residues of the SARS-CoV-2 spike glycoprotein (amino acid residues V16 to R685) and features a C-terminal poly-histidine tag.

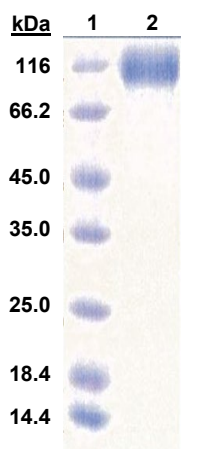
Lot: MM15FE2403

Manufacturing Date: 24FEB2021

| 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) > 90 ± 3% Target protein band(s) > 95% | Target protein band(s) 96.7% (Figure 1) ¹ Target protein band(s) 99.9% (Figure 2) |
| Concentration (A₂₈₀) | Report results | 2.19 mg per mL |
| Final Product Amount per vial Volume per vial | Report results Report results | 50 µg 23 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 |

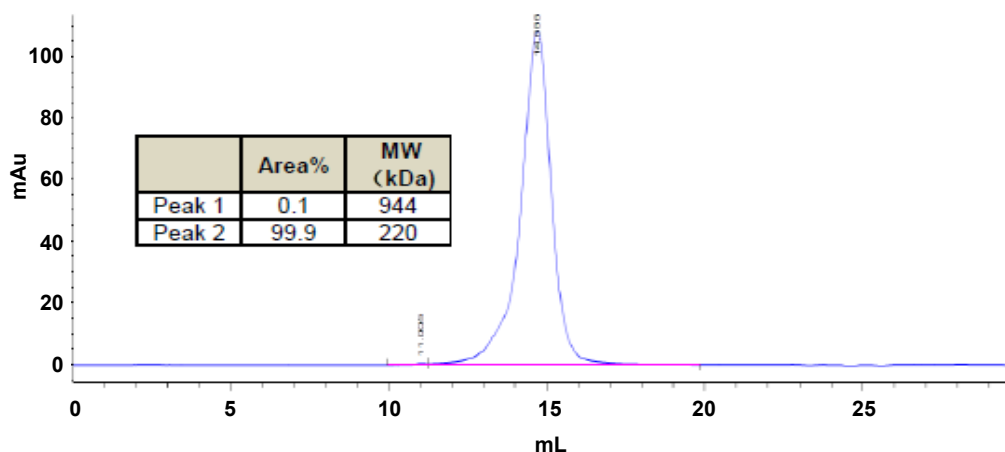
¹The recombinant protein migrated to a slightly larger size than was expected, likely caused by glycosylation common in recombinant spike proteins derived from coronaviruses. For more information, please see Chakraborti, S., et al. "The SARS Coronavirus S Glycoprotein Receptor Binding Domain: Fine Mapping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

Figure 1: SDS-PAGE



Lane 1: MW ladder
Lane 2: NR-53798

Figure 2: SEC-HPLC



/Heather Couch/

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28 MAY 2021

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