

**Spike Glycoprotein Receptor Binding Domain (RBD) from SARS-Related Coronavirus 2, South Africa Variant with C-Terminal Histidine Tag, Recombinant from HEK293 Cells**

**Catalog No. NR-54005**

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

**Product Description:**

A recombinant form of the spike (S) glycoprotein receptor binding domain (RBD) from severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2), South Africa variant was produced in human embryonic kidney HEK293 cells and purified by affinity chromatography. NR-54005 lacks the signal sequence and contains 223 residues of the SARS-CoV-2 S glycoprotein RBD and features a C-terminal hexa-histidine tag. NR-54005 is a South African variant of SARS-CoV-2, which includes K417N, E484K and N501Y mutations in the S glycoprotein RBD as compared to the SARS-CoV-2 reference sequence (GenPept: [QHD43416](#)).

**Lot: 70041629**

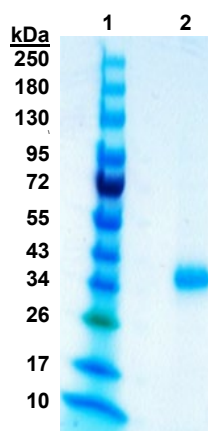
**Manufacturing Date: 12JAN2021**

TEST	SPECIFICATIONS	RESULTS
Appearance	Clear and colorless	Clear and colorless
SDS-PAGE Analysis	Protein band of interest represents > 90% of total staining intensity	Dominant band of ~ 30 kDa represents ≥ 95% of total staining intensity (Figure 1) <sup>1</sup>
Protein Concentration (pre-vial) <sup>2</sup>	Report results	0.25 mg per mL
Final Product Amount per vial Volume per vial	Report results Report results	25 µg 100 µL

<sup>1</sup>The 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.

<sup>2</sup>Concentration was determined by Bradford assay on the deposited bulk material prior to dilution for this lot.

**Figure 1: SDS-PAGE Analysis**



Lane 1: Color Prestained Protein Standard, Broad Range  
Lane 2: NR-54005 (1 µg)

/Heather Couch/

Heather Couch

26 JAN 2021

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