

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-52306

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

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: [QHD43416](#)) was produced in human embryonic kidney HEK293 cells and purified by nickel affinity chromatography. NR-52306 lacks the signal sequence and contains 223 residues of the SARS-CoV-2 spike glycoprotein RBD and features a C-terminal hexa-histidine tag.

Lot: 70033699

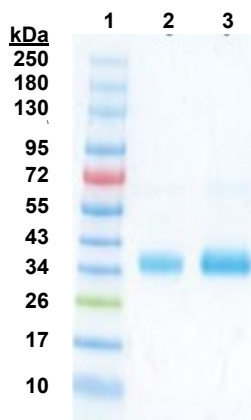
Manufacturing Date: 14FEB2020

TEST	SPECIFICATIONS	RESULTS
Appearance	Clear and colorless	Clear
SDS-PAGE Analysis	Protein band of interest represents > 90% of total staining intensity	Protein band of ~ 33 kDa represents > 90% of total staining intensity (Figure 1) ¹
Protein Concentration by Bradford Assay	Report results	0.25 mg per mL
Final Product Amount per vial Volume per vial	Report results Report results	25 µg 100 µL
Functional Activity Western blot analysis Monoclonal anti-histidine tag ELISA ²	Reactive Report results	Reactive Reactive (Figure 2)

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.

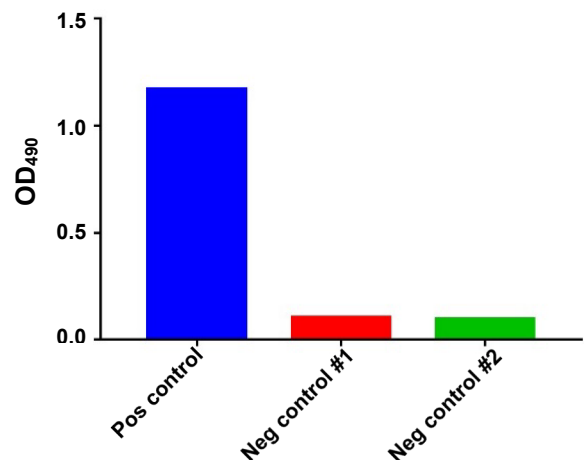
²Plates were coated overnight with 2 µg/mL of spike glycoprotein RBD and samples were used at a dilution of 1:50.

Figure 1: SDS-PAGE Analysis



Lane 1: Color Prestained Protein Standard, Broad Range
Lane 2: NR-52306 (1 µg)
Lane 3: NR-52306 (5 µg)

Figure 2: Standard ELISA



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