

**Spike Glycoprotein (Stabilized) from MERS Coronavirus, England 1 with C-Terminal Histidine and Twin-Strep® Tags, Recombinant from HEK293 Cells**

**Catalog No. NR-53591**

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

**Product Description:**

A recombinant form of the spike (S) glycoprotein from the England 1 strain (UK/H123990006/2012 isolate) of Middle East respiratory syndrome coronavirus (MERS-CoV; GenPept: [YP\\_007188579](#)) was produced by transient transfection into human embryonic kidney HEK293 (Freestyle 293F) cells and purified by immobilized metal affinity (Ni-NTA) and gel filtration (16/600 Superdex 200) chromatography. NR-53591 lacks the signal sequence and contains 1274 residues (ectodomain) of the MERS-CoV S glycoprotein; the recombinant protein was stabilized by substitution at the furin S1/S2 cleavage site (RSVR→ASVG; residues 748 to 751) and VL→PP mutations (residues 1060 and 1061), and includes a T4 foldon trimerization domain, HRV3C protease cleavage site, and C-terminal octa-histidine and Twin-Strep® tags.

**Lot: 70038007**

**Manufacturing Date: 20JUL2020**

TEST	SPECIFICATIONS	RESULTS
<b>Appearance</b>	Report results	Clear
<b>Purity</b> Analytical Fast Protein Liquid Chromatography (FPLC)	Report results	Peak observed at expected retention time (Figure 1)
<b>Protein Concentration (A<sub>280</sub>)</b>	Report results	0.25 mg per mL
<b>Final Product</b> Amount per vial Volume per vial	Report results Report results	25 µg 100 µL
<b>Functional Activity</b> ELISA <sup>1</sup>	Report results	Reactive (Figure 2)

<sup>1</sup>Using MERS-CoV/NCov Spike Protein Antibody, Rabbit (Novus Biologicals catalog number NBP2-90336)

**Figure 1: Analytical FPLC**

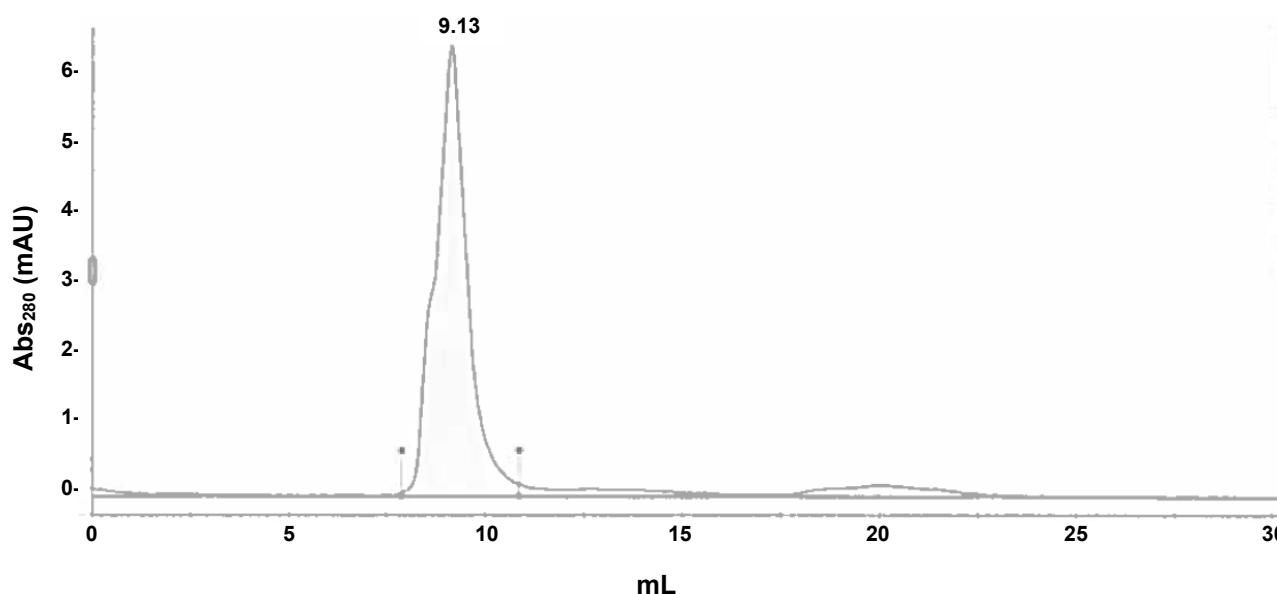
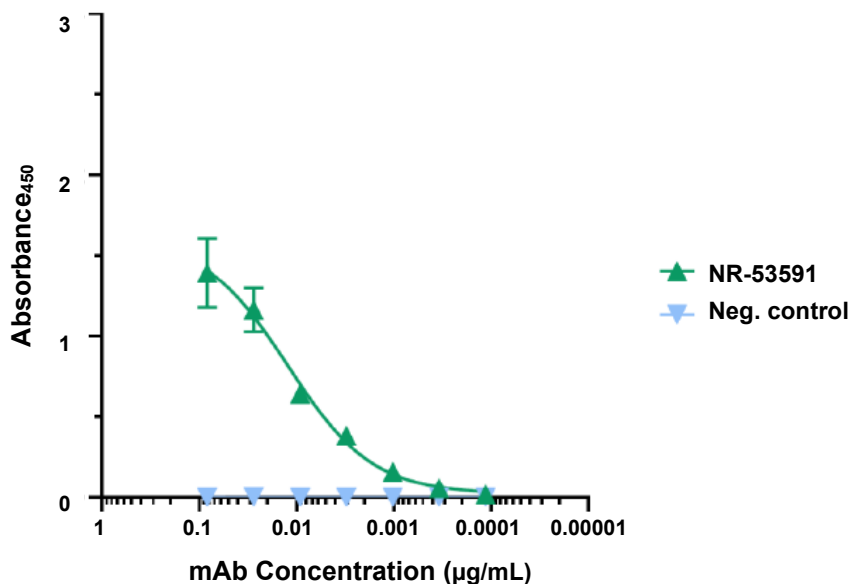


Figure 2: ELISA



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31 AUG 2020

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