Spike Glycoprotein Receptor Binding Domain (RBD) from SARS-Related Coronavirus 2, Wuhan-Hu-1 with C-Terminal Histidine Tag, Recombinant from HEK293F Cells

Catalog No. NR-52366
This reagent is the tangible property of the U.S. Government.

For research use only. Not for use in humans.

Contributor:
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Manufacturer:
BEI Resources

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 by transfection of purified plasmid in human embryonic kidney HEK293F cells and purified by nickel affinity chromatography.¹ NR-52366 lacks the signal sequence and contains 223 residues of the SARS-CoV-2 spike glycoprotein RBD and features a C-terminal hexa-histidine tag.²,³ The predicted protein sequence is shown in Figure 1. NR-52366 has a theoretical molecular weight of 25,900 daltons.

Note: For a detailed protocol and list of related items, see https://labs.icahn.mssm.edu/krammerlab/covid-19/

Material Provided:
Each vial of NR-52366 contains purified recombinant protein in phosphate buffered saline (PBS). The concentration and volume are shown on the Certificate of Analysis.

Packaging/Storage:
NR-52366 was packaged aseptically in cryovials. The product is provided on dry ice and should be stored at -60°C or colder immediately upon arrival. Freeze-thaw cycles should be avoided.

Functional Activity:
NR-52366 reacts with monoclonal anti-histidine tag in western blot analysis. NR-52366 is intended for western blot, ELISA and animal vaccination.²,³

Citation:
Acknowledgment for publications should read “The following reagent was produced under HHSN272201400008C and obtained through BEI Resources, NIAID, NIH: Spike Glycoprotein Receptor Binding Domain (RBD) from SARS-Related Coronavirus 2, Wuhan-Hu-1 with C-Terminal Histidine Tag, Recombinant from HEK293F Cells, NR-52366.”

Biosafety Level: 1

Disclaimers:
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References:

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Figure 1: Predicted Protein Sequence

1  RVQPTESIVR FPNITNLCPF GEVFNATRFA SVYAWNRKRI SNCVADYSVL
51 YNSASFSTFK CYGVSPTKLN DLCPTNVYAD SFVIRGDEVR QIAPGQTGKI
101 ADYNYLKD FTGCVIAWNS NNLDSKVGGN YNYLYRLFRK SNLKPHERDI
151 STEIYQAGST PCNGVEGFNC YFPLQSYQFQ PTNGVGYQPY RVVLSFELL
201 HAPATVCGBP KSTNVKNKC VNFHHHHHH

RBD – Residues 1 to 223 (represents amino acid residues 319 to 541)
Hexa-histidine tag – Residues 224 to 229