

Recombinant SARS-CoV-2 Spike protein RBD (L452Q, F490S) Protein, His-tagged

Cat. No. S-1003S Lot. No. (See product label)

SPECIFICATION

Product Overview

Recombinant 2019-nCoV Spike protein S1 subunit, RBD (L452Q, F490S) (319-541) was expressed in CHO cells using a C-terminal his tag.

Species

SARS-CoV-2

Source

CHO

ProteinLength

319-541 a.a.

Description

The receptor binding domain (RBD) of SARS-CoV-2 spike glycoprotein can recognize the ACE2 receptor of the host and is an important determining factor of viral entry and neutralization. The Lambda variant (VUI-21JUN-01, lineage C.37) carries the mutations L452Q and F490S on its RBD and the mutations manifest resistance to antiviral immunity. In addition, the L452Q mutation further increases the viral infectivity of the virus. The Lambda variant was first reported in Peru in August 2020, and since then has spread to most South American countries. As more variants of the virus emerge, it is pivotal to study the transmissibility, virulence, and the possible tendency to escape antibody neutralization of the virus.

Molecular Mass

39 kDa

Purity

> 90%

Stability

One year at -70 centigrade from date of shipment.

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Storage	Store product at -70 centigrade. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
Concentration	2.0 $\mu\text{g}/\mu\text{L}$
Storage Buffer	Recombinant protein stored in 50 mM sodium phosphate, pH 7.5, 300 mM NaCl, 150 mM imidazole.

GENE INFORMATION

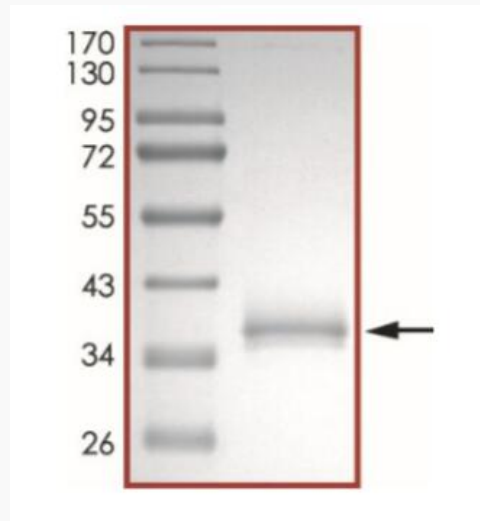
Gene Name	S surface glycoprotein [Severe acute respiratory syndrome coronavirus 2]
Official Symbol	S
Synonyms	S; surface glycoprotein; spike glycoprotein; surface glycoprotein; structural protein; spike protein
Gene ID	43740568
mRNA Refseq	MN908947
Protein Refseq	YP_009724390

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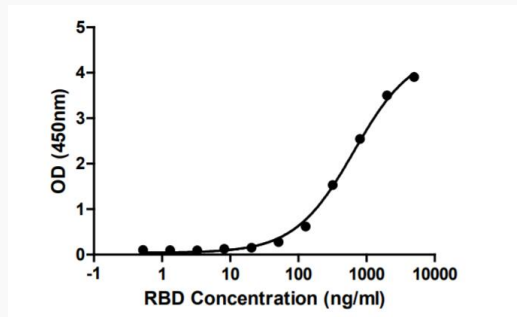
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SDS-PAGE



The purity of nCoV-RBD (L452Q, F490S) was determined to be > 90% by densitometry.

Activity



Binding ability measured in a functional ELISA. 2019-nCoV Spike protein RBD (L452Q, F490S) binds to immobilized human ACE2(19-740) protein.

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