

Recombinant SARS-CoV-2 Spike protein S1 (T19R, Δ157-158, L452R, T478K, D614G, P681R) Protein, His-tagged

Cat. No. S-1002S **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant 2019-nCoV Spike protein S1 (T19R, Δ157-158, L452R, T478K, D614G, P681R) (16-685) was expressed in CHO cells using a C-terminal His-tag.
Species	SARS-CoV-2
Source	CHO
ProteinLength	16-685 a.a.
Description	Severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) remains the most rapidly spreading disease since 2020. The spike glycoprotein (S) of coronavirus, a type I transmembrane protein containing two subunits S1 and S2, facilitates viral genome entry into the host cells through the interaction with angiotensin-converting enzyme 2 (ACE2). B.1.617, also referred to as the Indian variant, caused a surge in COVID-19 cases in India in early 2021. This variant has also been reported in UK and US. B.1.617 has 13 mutations that result in amino acid changes. These mutations include T19R, Δ157-158, L452R, T478K, D614G, P681R. As new variants displace the first-wave virus, it is pivotal to evaluate their transmissibility, virulence and their possible tendency to escape antibody neutralization.
Molecular Mass	76 kDa
Purity	> 90%

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Stability	One year at -70 centigrade from date of shipment.
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	1.0 µg/µL
Storage Buffer	Recombinant protein stored in 50 mM sodium phosphate, pH 7.5, 300 mM NaCl, 150 mM imidazole.

GENE INFORMATION

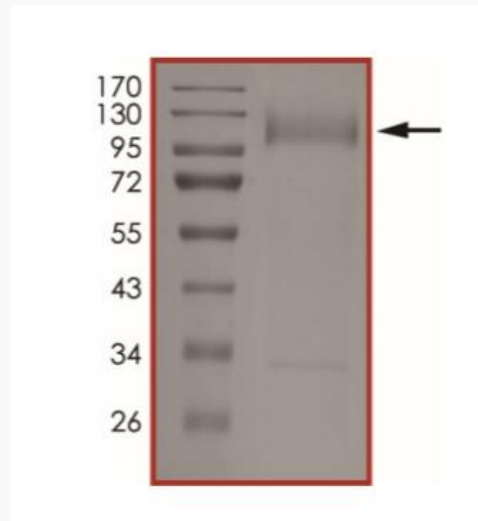
Gene Name	S surface glycoprotein [Severe acute respiratory syndrome coronavirus 2]
Official Symbol	S
Synonyms	S; surface glycoprotein; spike glycoprotein; surface glycoprotein; structural protein; spike protein
Gene ID	43740568
mRNA Refseq	MN908947
Protein Refseq	YP_009724390

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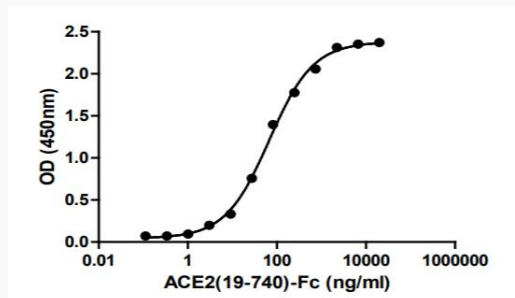
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SDS-PAGE



The purity of 2019-nCoV Spike protein S1 (T19R, Δ 157-158, L452R, T478K, D614G, P681R) was determined to be > 90% by densitometry.

Activity



Binding of ACE2(19-740) Protein to immobilized 2019-nCoV Spike protein S1 (T19R, Δ 157-158, L452R, T478K, D614G, P681R) was determined by functional ELISA.

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