

Active Recombinant COVID-19 Spike protein RBD (N501Y), His-tagged

Cat. No. Spike-4722V **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant COVID-19 protein RBD (N501Y)(Arg 319 - Lys 537), fused with His tag, was expressed in HEK293.
Species	Sars-CoV-2
Source	HEK293
ProteinLength	Arg 319 - Lys 537
Form	Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.
Bio-activity	Immobilized Human ACE2, Fc Tag at 1 µg/mL (100 µL/well) can bind SARS-CoV-2 S protein RBD (N501Y), His Tag with a linear range of 2-39 ng/mL. Immobilized SARS-CoV-2 S protein RBD (N501Y), His Tag at 1 µg/mL (100 µL/well) can bind Anti-SARS-CoV-2 RBD Potent Neutralizing Antibody, Human IgG1 with a linear range of 0.1-3 ng/mL. Serial dilutions of Monoclonal Anti-SARS-CoV-2 RBD Potent Neutralizing Antibody, Human IgG1 were added into SARS-CoV-2 S protein RBD (N501Y), His Tag: Biotinylated Human ACE2, His, Avitag binding reactions. The half maximal inhibitory concentration (IC50) is 1.13169.
Molecular Mass	This protein carries a polyhistidine tag at the C-terminus. The protein has a calculated MW of 26.6 kDa. The protein migrates as 33-35 kDa under reducing (R) condition

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	(SDS-PAGE) due to glycosylation.
Endotoxin	Less than 1.0 EU per µg by the LAL method.
Purity	>95% as determined by SDS-PAGE.>90% as determined by SEC-MALS.
Storage	For long term, the product should be stored at lyophilized state at -20°C or lower.Please avoid repeated freeze-thaw cycles. This product is stable after at:-20°C to -70°C for 12 months in lyophilized state;-70°C for 3 months under sterile conditions after reconstitution.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.

GENE INFORMATION

Gene Name	S surface glycoprotein [Severe acute respiratory syndrome coronavirus 2]
Official Symbol	Spike
Synonyms	Spike; S1 protein; Spike glycoprotein Subunit1; S glycoprotein Subunit1; Spike protein S1; COVID-19 Omicron
Gene ID	43740568
Protein Refseq	YP_009724390.1
UniProt ID	P0DTC2

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