

Recombinant COVID-19 (BA.4/BA.5/BA. 5.2) Spike RBD protein(Arg319-Phe541), His&Avi-tagged, Biotinylated

Cat. No. Spike-1240V **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant SARS-CoV-2 Spike RBD (YP_009724390.1, with mutation G339D, S371F, S373P, S375F, T376A, D405N, R408S, K417N, N440K, L452R, S477N, T478K, E484A, F486V, Q498R, N501Y, Y505H) (Arg319-Phe541) was expressed in HEK293 with a C-terminal polyhistidine tag followed by an AVI tag. The expressed protein was biotinylated in vivo by the Biotin-Protein ligase (BirA enzyme) which is co-expressed. The mutations were identified in the SARS-CoV-2 variant (known as variant BA.4/BA.5/BA. 5.2).
Species	Sars-CoV-2
Source	HEK293
ProteinLength	Arg319-Phe541
Conjugation/Label	Biotin
Form	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Bio-activity	Immobilized human ACE2 protein (Fc tag) at 2 µg/mL (100 µL/well) can bind Recombinant SARS-CoV-2(BA.4/BA.5/BA. 5.2)Spike RBD Protein(His&AVI Tag), Biotinylated, the EC50 is 15-45 ng/mL.
Molecular Mass	The recombinant SARS-CoV-2 (BA.4/BA.5/BA. 5.2) Spike RBD consists of 249 amino

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acids and predicts a molecular mass of 28.49 kDa. As a result of glycosylation, it migrates as an approximately 38.44 kDa band in SDS-PAGE under reducing conditions.

Endotoxin < 1.0 EU per µg protein as determined by the LAL method.

Purity > 95 % as determined by SDS-PAGE. > 95 % as determined by SEC-HPLC.

Storage Samples are stable for up to twelve months from date of receipt at -20°C to -80°C. Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

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.

Conjugation Biotin

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

Gene ID 43740568

Protein Refseq YP_009724390.1

UniProt ID P0DTC2

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