

Recombinant COVID-19 BA. 2.75 (Omicron) Spike RBD protein(Arg319-Phe541), His&Avi-tagged, Biotinylated

Cat. No. Spike-1239V **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant SARS-CoV-2 (BA. 2.75) Spike RBD (YP_009724390.1, with mutation G339H, S371F, S373P, S375F, T376A, D405N, R408S, K417N, N440K, G446S, N460K, S477N, T478K, E484A, Q498R, N501Y, Y505H) (Arg319-Phe541) was expressed in HEK293 with a C-terminal polyhistidine tag followed by an AVI tag. The mutations were identified in the SARS-CoV-2 variant (known as variant BA. 2.75). The expressed protein was biotinylated in vivo by the Biotin-Protein ligase (BirA enzyme) which is co-expressed.
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. 2.75)Spike RBD Protein (His&AVI Tag), Biotinylated, the EC50 is 1.8-6 ng/mL.
Molecular Mass	The recombinant SARS-CoV-2 Spike RBD consists of 249 amino acids and predicts a

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	molecular mass of 28.56 kDa. As a result of glycosylation, it migrates as an approximately 34.72 kDa band in SDS-PAGE under reducing conditions.
Endotoxin	< 1.0 EU per µg protein as determined by the LAL method.
Purity	> 90 % as determined by SDS-PAGE. > 90 % 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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