

# Recombinant COVID-19 B.1.1.529 (Omicron) Spike S1 protein(Met1-Arg685), His-tagged

Cat. No. Spike-1234V Lot. No. (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant SARS-CoV-2 Spike S1 (YP_009724390.1, with mutations A67V, HV69-70 deletion, T95I, G142D, VYY143-145 deletion, N211 deletion, L212I, ins214EPE, G339D, S371L, S373P, S375F, K417N, N440K, G446S, S477N, T478K, E484A, Q493R, G496S, Q498R, N501Y, Y505H, T547K, D614G, H655Y, N679K, P681H) (Met1-Arg685) was expressed in HEK293 with a polyhistidine tag at the C-terminus. The mutations were identified in the SARS-CoV-2 variant (known as variant B.1.1.529) which emerged in the South Africa.
<b>Species</b>	Sars-CoV-2
<b>Source</b>	HEK293
<b>ProteinLength</b>	Met1-Arg685
<b>Form</b>	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
<b>Bio-activity</b>	Immobilized human ACE2 protein (mFc tag) at 2 µg/mL (100 µL/well) can bind SARS-CoV-2 B.1.1.529 (Omicron) S1 Protein (His Tag), the EC50 of is 45-140 ng/mL.
<b>Molecular Mass</b>	The recombinant SARS-CoV-2 Spike S1 consists of 678 amino acids and predicts a molecular mass of 76.48 kDa. As a result of glycosylation, it migrates as an approximately 99.56 kDa band in SDS-PAGE under reducing conditions.

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<b>Endotoxin</b>	< 1.0 EU per µg protein as determined by the LAL method.
<b>Purity</b>	> 95% as determined by SDS-PAGE. > 95 % as determined by SEC-HPLC.
<b>Storage</b>	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.
<b>Reconstitution</b>	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

<b>Gene Name</b>	<a href="#">S surface glycoprotein [ Severe acute respiratory syndrome coronavirus 2 ]</a>
<b>Official Symbol</b>	<a href="#">Spike</a>
<b>Synonyms</b>	Spike; S1 protein; Spike glycoprotein Subunit1; S glycoprotein Subunit1; Spike protein S1
<b>Gene ID</b>	<a href="#">43740568</a>
<b>Protein Refseq</b>	<a href="#">YP_009724390.1</a>
<b>UniProt ID</b>	<a href="#">P0DTC2</a>

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