Recombinant COVID-19 B.1.1.529 (Omicron) S1+S2 trimer protein(), His-tagged

Cat. No. Spike-1231V **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant SARS-CoV-2 Spike S1+S2 (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, N764K, D796Y, F817P, N856K, A892P, A899P, A942P, Q954H, N969K, L981F, K986P, V987P and furin cleavage site mutants) expressed in HEK293 with the bacteriophage T4 fibritin and 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.
Species	Sars-CoV-2
Source	HEK293
Form	Lyophilized from sterile 25mM sodium citrate, 200mM NaCl, 0.02% tween80, pH6.0. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Bio-activity	Immobilized human ACE2 protein (mFc tag) at 2 μg/mL (100 μL/well) can bind SARS-CoV-2 B.1.1.529 (Omicron) S1+S2 trimer Protein (ECD, His Tag), the EC50 is 4-15 ng/mL.
Molecular Mass	The recombinant SARS-CoV-2 Spike S1+S2 consists of 1228 amino acids and

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	predicts a molecular mass of 136.67 kDa.
Endotoxin	< 1.0 EU per μg protein as determined by the LAL method.
Purity	> 90 % 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.

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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