Recombinant COVID-19 BM.1.1.1 (Omicron) Spike RBD protein(Arg319-Phe541), His-tagged

Cat. No. Spike-1218V **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant SARS-CoV-2 (BM.1.1.1) Spike RBD (YP_009724390.1, with mutation G339H, R346T, S371F, S373P, S375F, T376A, D405N, R408S, K417N, N440K, G446S, N460K, S477N, T478K, E484A, F486S, F490S, Q498R, N501Y, Y505H) (Arg319-Phe541) 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 BM.1.1.1).
Species	Sars-CoV-2
Source	HEK293
ProteinLength	Arg319-Phe541
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 BM.1.1.1 (Omicron) Spike RBD Protein (His Tag), the EC50 is 20-60 ng/mL.
Molecular Mass	The recombinant SARS-CoV-2 (BM.1.1.1) Spike RBD consists of 234 amino acids and predicts a molecular mass of 26.57 kDa. As a result of glycosylation, it migrates as an approximately 35.31 kDa band in SDS-PAGE under reducing conditions.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

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.

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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