

SARS-COV-2 Spike RBD (Omicron B.1.1.529) Protein

Cat. No. COV-VM1RO

Description

Source	Recombinant SARS-COV-2 Spike RBD (Omicron B.1.1.529) Protein is expressed from Expi293 with His tag at the C-terminal. It contains Arg319-Phe541(G339D, S371L, S373P, S375F, K417N, N440K, G446S, S477N, T478K, E484A, Q493R, G496S, Q498R, N501Y, Y505H).
Accession	QHO60594.1
Molecular Weight	The protein has a predicted MW of 26.2 kDa. Due to glycosylation, the protein migrates to 35-40 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per ug by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

Formulation and Storage

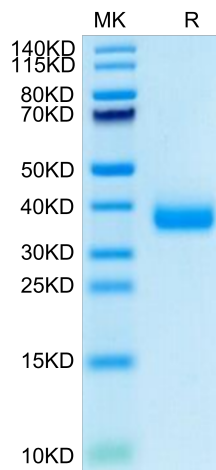
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge tubes before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please avoid freeze-thaw cycles.

Background

The spike protein (S) of coronavirus (CoV) attaches the virus to its cellular receptor, angiotensin-converting enzyme 2 (ACE2). A defined receptor-binding domain (RBD) on S mediates this interaction. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity.

Assay Data

Tris-Bis PAGE



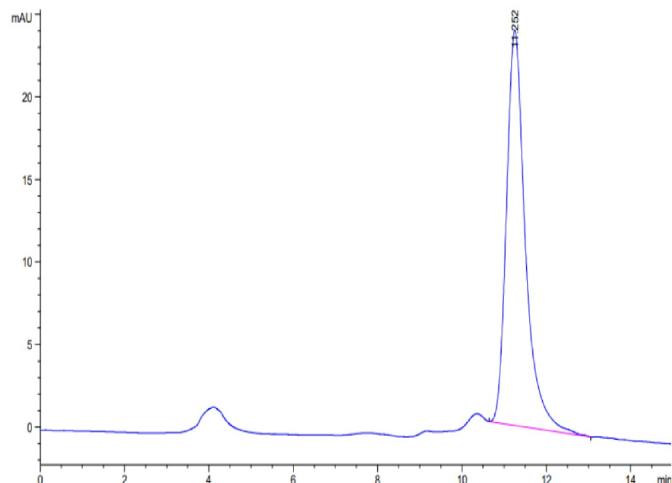
SARS-COV-2 Spike RBD (Omicron B.1.1.529) on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

SARS-COV-2 Spike RBD (Omicron B.1.1.529) Protein

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Assay Data

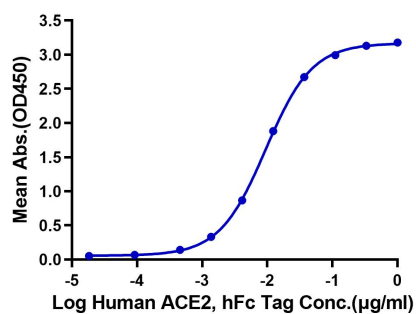


The purity of SARS-COV-2 Spike RBD (Omicron B.1.1.529) is greater than 95% as determined by SEC-HPLC.

ELISA Data

SARS-COV-2 Spike RBD (Omicron B.1.1.529) , His Tag ELISA

0.1µg SARS-COV-2 Spike RBD (Omicron B.1.1.529) , His Tag Per Well



Immobilized SARS-COV-2 Spike RBD (Omicron B.1.1.529) , His Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 9.4ng/ml determined by ELISA.