

SARS-CoV-2 Spike S1 (Omicron BA.4/BA.5/BA.5.2) Protein

Cat. No. BAS-VM145

Description

Recombinant SARS-CoV-2 Spike S1 (Omicron BA.4/BA.5/BA.5.2) Protein is expressed from HEK293 with His tag at the C-Terminus.

Source

It contains Gln14-Arg683(T19I, L24S, PPA25-27del, HV69-70del, G142D, V213G, G339D, S371F, S373P, S375F, T376A, D405N, R408S, K417N, N440K, L452R, S477N, T478K, E484A, F486V, Q498R, N501Y, Y505H, D614G, H655Y, N679K, P681H).

Accession

QHD43416.1

Molecular Weight

The protein has a predicted MW of 75.76 kDa. Due to glycosylation, the protein migrates to 100-120 kDa based on Tris-Bis PAGE result.

Endotoxin

Less than 1EU per μg by the LAL method.

Purity

> 95% as determined by Tris-Bis PAGE

> 95% as determined by HPLC

Formulation and Storage

Formulation

Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

Reconstitution

Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.

Storage

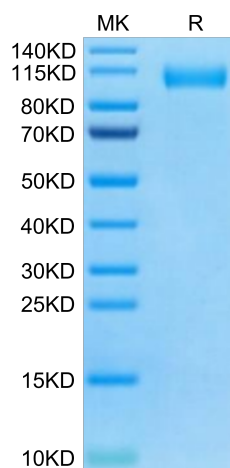
-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

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



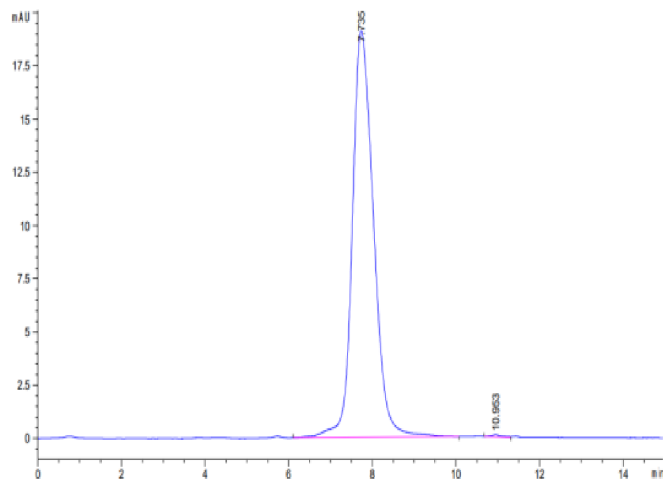
SARS-CoV-2 Spike S1 (Omicron BA.4/BA.5/BA.5.2) on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

SARS-CoV-2 Spike S1 (Omicron BA.4/BA.5/BA.5.2) Protein

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Assay Data

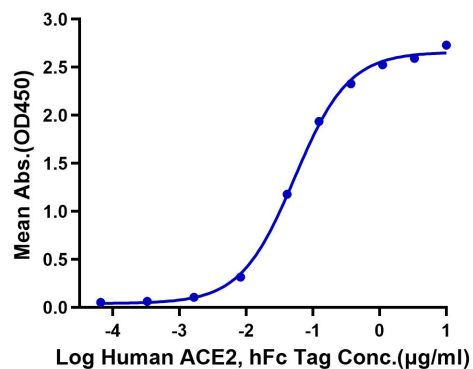


The purity of SARS-CoV-2 Spike S1 (Omicron BA.4/BA.5/BA.5.2) is greater than 95% as determined by SEC-HPLC.

ELISA Data

SARS-CoV-2 Spike S1 (Omicron BA.4/BA.5/BA.5.2), His Tag ELISA

0.2µg SARS-CoV-2 Spike S1 (Omicron BA.4/BA.5/BA.5.2), His Tag Per Well



Immobilized SARS-CoV-2 Spike S1 (Omicron BA.4/BA.5/BA.5.2), His Tag at 2µg/ml (100µl/Well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 53.4ng/ml determined by ELISA.