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

Cat. No. BAS-VM145

Description

Source	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.
	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 Bis-Tris PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 95% as determined by HPLC

Formulation and Storage

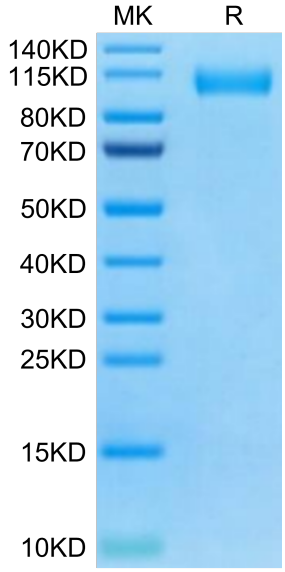
Formulation	Lyophilized from 0.22μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 μg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt.-80°C for 3 months 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

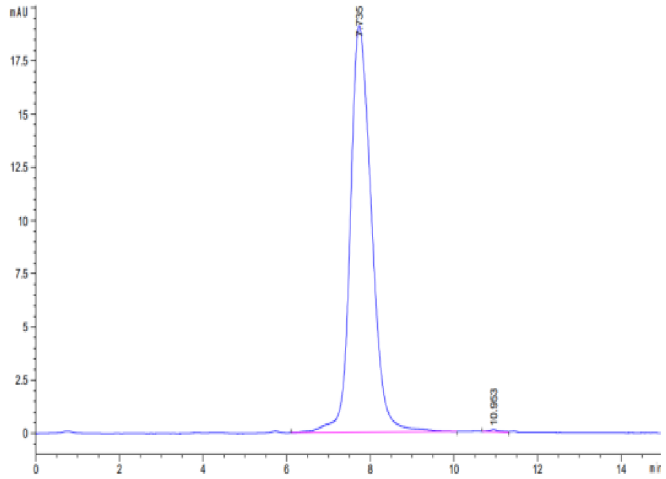
Bis-Tris PAGE



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

SEC-HPLC

Assay Data

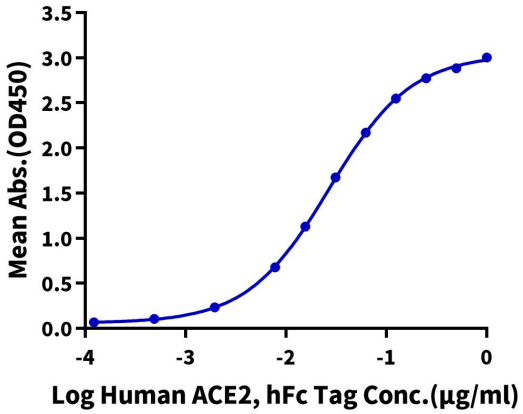


The purity of SARS-CoV-2 Spike S1 (Omicron BA.4/BA.5/BA.5.2) is greater than 95% as determined by SEC-HPLC.

ELISA Data

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

0.5μg SARS-CoV-2 Spike S1 (Omicron BA.4/ BA.5), His Tag Per Well



Immobilized SARS-CoV-2 Spike S1 (Omicron BA.4/BA.5/BA.5.2), His Tag at 5μg/ml (100μl/Well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 27.0ng/ml determined by ELISA.