SARS-COV-2 Spike S (B.1.640.2/IHU) Trimer Protein

Cat. No. IHU-VM1ST

Description

Source	Recombinant SARS-COV-2 Spike S (B.1.640.2/IHU) Trimer Protein is expressed from HEK293 with His tag at the C-Terminus.
	It contains Val16-Pro1213(E96Q, CNDPFLGV136-144del, R190S, D215H, R346S, N394S, Y449N, E484K, F490S, N501Y, D614G, P681H, T859N, D1139H). Proline substitutions (F817P, A892P, A899P, A942P, K986P, V987P) and alanine substitutions (R683A and R685A) are introduced to stabilize the trimeric prefusion state of SARS-CoV-2 S protein and abolish the furin cleavage site, respectively.
Accession	QHD43416.1
Molecular Weight	The protein has a predicted MW of 133.60 kDa. Due to glycosylation, the protein migrates to 140-160 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

Formulation and Storage

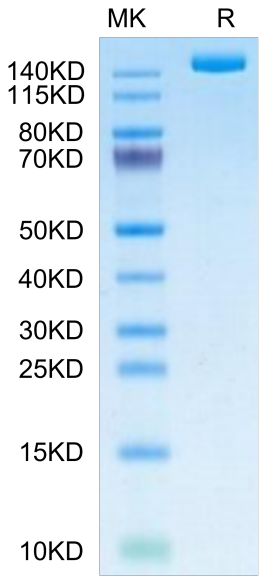
Formulation	Lyophilized from 0.22μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 μg/ml is recommended. Dissolve the lyophilized protein in distilled 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



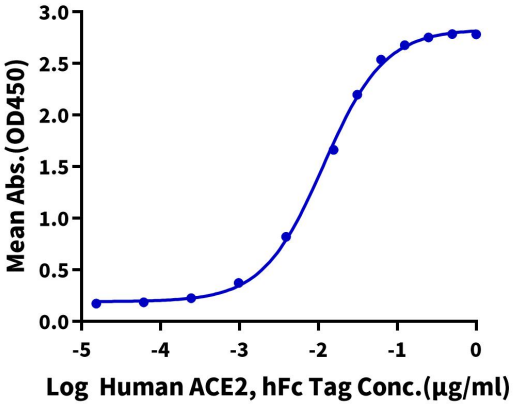
SARS-COV-2 Spike S (B.1.640.2/IHU) Trimer on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

ELISA Data

Assay Data

SARS-COV-2 Spike S (B.1.640.2/IHU) Trimer, His Tag ELISA

0.2μg SARS-COV-2 Spike S (B.1.640.2/IHU) Trimer, His Tag Per Well



Immobilized SARS-COV-2 Spike S (B.1.640.2/IHU) Trimer, His Tag at 2μg/ml (100μl/well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 11.6ng/ml determined by ELISA (QC Test).