

Datasheet for ABIN6953300

SARS-CoV-2 Spike Protein (D614G, Super Stable Trimer) (His tag,AVI tag,Biotin)



[Go to Product page](#)

4 Images

Overview

Quantity:	200 µg
Target:	SARS-CoV-2 Spike
Protein Characteristics:	D614G, Super Stable Trimer
Origin:	SARS Coronavirus-2 (SARS-CoV-2)
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SARS-CoV-2 Spike protein is labelled with His tag,AVI tag,Biotin.
Application:	ELISA

Product Details

Purpose:	Biotinylated SARS-CoV-2 S protein (D614G), His,Avitag™, Super stable trimer (MALS verified)
Sequence:	AA 16-1213
Specificity:	Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.
Characteristics:	<p>Biotinylated SARS-CoV-2 S protein (D614G), His,Avitag, Super stable trimer is the ectodomain of SARS-CoV-2 S protein that contains AA Val 16 - Pro 1213 (Accession # QHD43416.1(D614G) and D614G mutation, which has become increasingly common in SARS-CoV-2 viruses from around the world .</p> <p>The recombinant protein is expressed from human 293 cells (HEK293) with T4 fibrin trimerization motif and a polyhistidine tag at the C-terminus.</p> <p>Proline substitutions (F817P, A892P, A899P, A942P, K986P, V987P) and alanine substitutions</p>

Product Details

(R683A and R685A) are introduced to stabilize the trimeric prefusion state of SARS-CoV-2 S protein and abolish the furin cleavage site, respectively.

It is the biotinylated form of SARS-CoV-2 S protein (D614G), His Tag, Super stable trimer (MALS verified) SPN-C52H3).

Purity: > 95 % as determined by SDS-PAGE. > 90 % as determined by SEC-MALS.

Sterility: 0.22 µm filtered

Endotoxin Level: Less than 1.0 EU per µg by the LAL method.

Target Details

Target: SARS-CoV-2 Spike

Abstract: [SARS-CoV-2 Spike Products](#)

Target Type: Viral Protein

Background: It's been reported that Coronavirus can infect the human respiratory epithelial cells through interaction with the human ACE2 receptor. The spike protein is a large type I transmembrane protein containing two subunits, S1 and S2. S1 mainly contains a receptor binding domain (RBD), which is responsible for recognizing the cell surface receptor. S2 contains basic elements needed for the membrane fusion. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity.

Molecular Weight: 139.7 kDa

Application Details

Application Notes: Optimal working dilution should be determined by the investigator.

Comment: Ready-to-use Avitag™ biotinylated protein:

The product is exclusively produced using the Avitag™ technology. Briefly, a unique 15 amino acid peptide, the Avi tag, is introduced into the recombinant protein during expression vector construction. The single lysine residue in the Avi tag is enzymatically biotinylated by the E. Coli biotin ligase BirA.

This single-point enzymatic labeling technique brings many advantages for commonly used binding assays. The biotinylation happens on the lysine residue of Avi tag, and therefore does NOT interfere with the target protein's natural binding activities. In addition, when immobilized on an avidin-coated surface, the protein orientation is uniform because the position of the Avi

Application Details

tag in the protein is precisely controlled.

Restrictions: For Research Use only

Handling

Format: Lyophilized

Buffer: PBS

Storage: -20 °C, -80 °C

Storage Comment: For long term storage, the product should be stored at lyophilized state at -20°C or lower.

This product is stable after storage at:

-20°C to -70°C for 12 months in lyophilized state

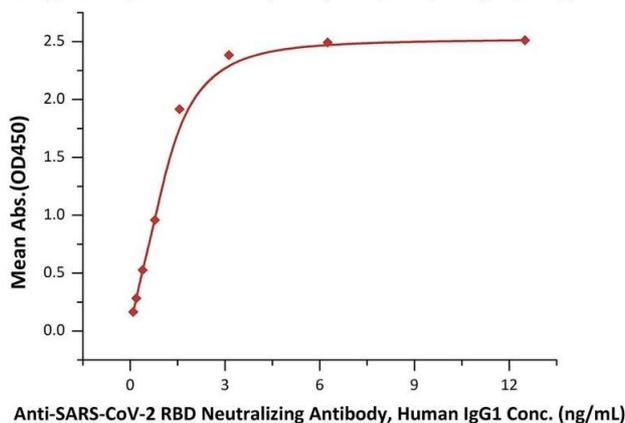
70°C for 3 months under sterile conditions after reconstitution.

Expiry Date: 12 months

Images

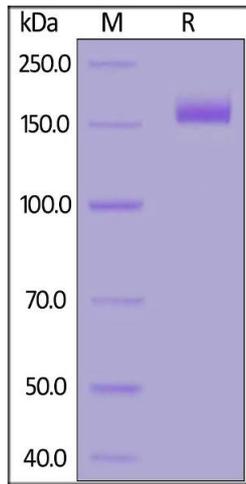
Biotinylated SARS-CoV-2 S protein (D614G, R683A, R685A), His, Avitag ELISA

0.1 µg of Biotinylated SARS-CoV-2 S protein (D614G, R683A, R685A), His, Avitag per well



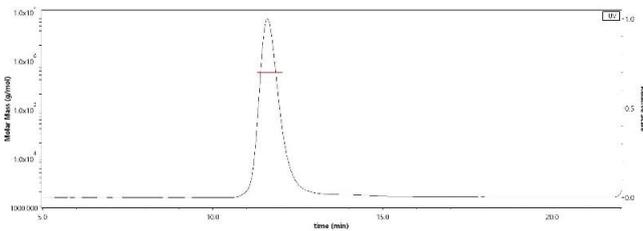
ELISA

Image 1. Immobilized Biotinylated SARS-CoV-2 S protein (D614G), His, Avitag, Super stable trimer (Cat. No. ABIN6953300) at 1 µg/mL (100 µL/well) on Recombinant Streptavidin precoated (0.5 µg/well) plate, can bind Anti-SARS-CoV-2 RBD Neutralizing Antibody, Human IgG1 (Cat. No. ABIN6952616) with a linear range of 0.1-2 ng/mL (Routinely tested).



SDS-PAGE

Image 2. Biotinylated SARS-CoV-2 S protein (D614G), His,Avitag, Super stable trimer on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95 % .



Size-exclusion chromatography-High Pressure Liquid Chromatography

Image 3. The purity of Biotinylated SARS-CoV-2 S protein (D614G), His,Avitag™, Super stable trimer (Cat. No. ABIN6953300) was more than 90 % and the molecular weight of this protein is around 520-620 kDa verified by SEC-MALS.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN6953300.