

Datasheet for ABIN6992378

SARS-CoV-2 Spike Protein (B.1.351 - beta, Trimer) (His tag)[Go to Product page](#)**3** Images

Overview

Quantity:	50 µg
Target:	SARS-CoV-2 Spike
Protein Characteristics:	B.1.351 - beta, Trimer
Origin:	SARS Coronavirus-2 (SARS-CoV-2), SARS CoV-2 Beta
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This SARS-CoV-2 Spike protein is labelled with His tag.

Product Details

Purpose:	SARS-CoV-2 S protein (L18F, D80A, D215G, 242-244del, R246I, K417N, E484K, N501Y, D614G, A701V) trimer, His Tag (MALS verified)
Sequence:	AA 16-1213
Characteristics:	SARS-CoV-2 S protein trimer, His Tag is expressed from human 293 cells (HEK293). It contains AA Val 16 - Pro 1213 (Accession # QHD43416.1). The recombinant protein is expressed from human 293 cells (HEK293) with T4 fibritin trimerization motif and a polyhistidine tag at the C-terminus. 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. L18F/ D80A/ D215G/ LAL242-244del/ R246I/ K417N/ E484K/ N501Y/ D614G/ A701V mutations were identified on the spike protein in the SARS-CoV-2 variant (known as B.1.351 or 20C/501Y.V2) which emerged in South Africa.

Product Details

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

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

Target Details

Target: SARS-CoV-2 Spike

Alternative Name: SARS-CoV-2 S protein ([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: 137.6 kDa

Application Details

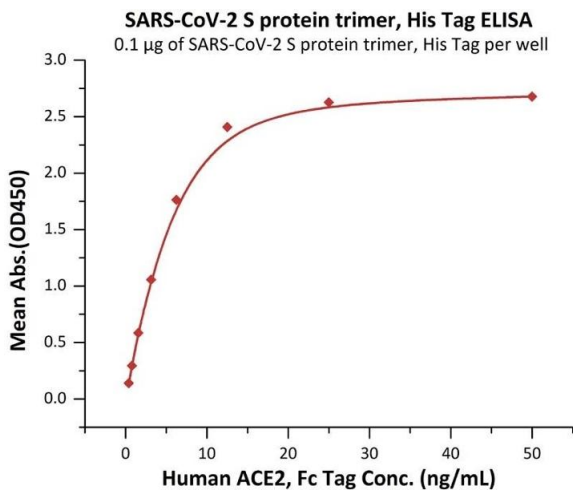
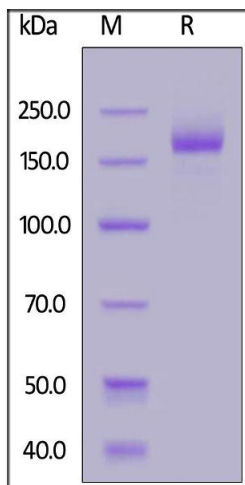
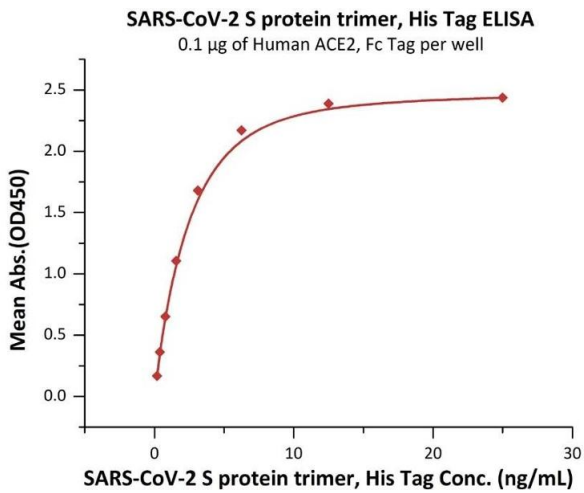
Restrictions: For Research Use only

Handling

Format: Lyophilized

Buffer: PBS

Storage: -20 °C



ELISA

Image 1. Immobilized Human ACE2, Fc Tag (ABIN6952459,ABIN6952465) at 1 µg/mL (100 µL/well) can bind SARS-CoV-2 S protein trimer, His Tag (ABIN6992378) with a linear range of 0.2-3 ng/mL (Routinely tested).

SDS-PAGE

Image 2. SARS-CoV-2 S protein trimer, His Tag on under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90 % .

ELISA

Image 3. Immobilized SARS-CoV-2 S protein trimer, His Tag (ABIN6992378) at 1 µg/mL (100 µL/well) can bind Human ACE2, Fc Tag (ABIN6952459,ABIN6952465) with a linear range of 0.4-6 ng/mL (QC tested).