

Datasheet for ABIN7013280

SARS-CoV-2 Spike Protein (P.1 - gamma) (His tag)[Go to Product page](#)**3** Images

Overview

Quantity:	50 µg
Target:	SARS-CoV-2 Spike
Protein Characteristics:	P.1 - gamma
Origin:	SARS Coronavirus-2 (SARS-CoV-2), SARS CoV-2 Gamma
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

Sequence:	AA 16-1213
Specificity:	SARS-CoV-2 S protein (L18F, T20N, P26S, D138Y, R190S, K417T, E484K, N501Y, D614G, H655Y, T1027I, V1176F), His Tag (MALS verified)
Characteristics:	SARS-CoV-2 S protein, His Tag is the ectodomain of SARS-CoV-2 S protein that contains AA Val 16 - Pro 1213 (Accession # QHD43416.1) and mutations, which have become increasingly common in SARS-CoV-2 viruses from around the world. 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/ T20N/ P26S/ D138Y/ R190S/ K417T/ E484K/ N501Y/ D614G/ H655Y/ T1027I/ V1176F mutations were identified in the SARS-CoV-2 variant (known as variant P.1) which emerged in the Brazil.

Product Details

Purity: >95 % 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: 138.1 kDa

Application Details

Application Notes: MALS verified

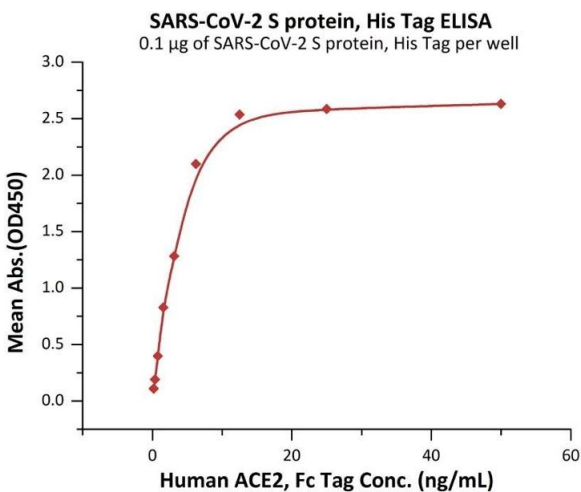
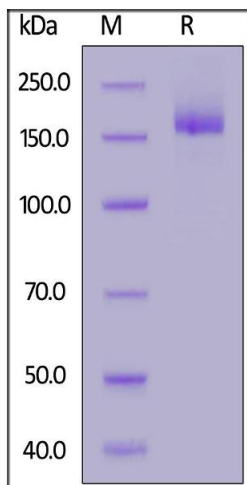
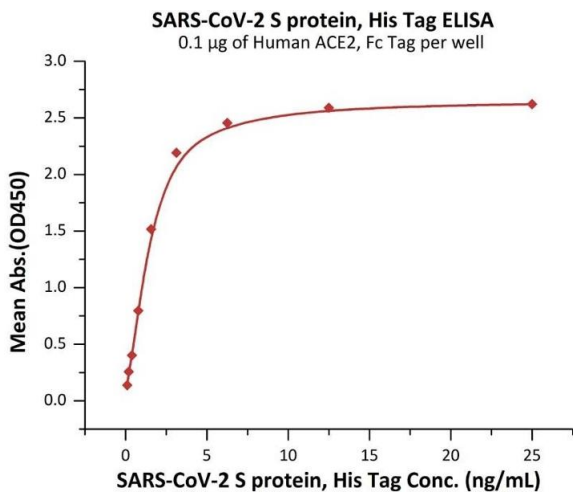
Restrictions: For Research Use only

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, His Tag (ABIN6973219) with a linear range of 0.1-2 ng/mL (Routinely tested).

SDS-PAGE

Image 2. SARS-CoV-2 S protein, His Tag on under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95 %.

ELISA

Image 3. Immobilized SARS-CoV-2 S protein, His Tag (ABIN6973219) at 1 µg/mL (100 µL/well) can bind Human ACE2, Fc Tag (ABIN6952459,ABIN6952465) with a linear range of 0.2-6 ng/mL (QC tested).