

Technical Data Sheet

Biotinylated SARS-CoV-2 Spike S1 Protein (D614G) (C-His-Avi)

Catalog Number: 603203, 603204

Size: 25 ug, 100 ug

Target Name: SARS-CoV2 Spike S1 Protein, S1 Protein

Regulatory Status: RUO

Product Details

Application: ELISA, BLI

Format: Liquid, Biotinylated

Expression Host: CHO

Species: SARS-CoV-2

Accession Number: QHD43416.1

Sources: Recombinant SARS-CoV-2 S protein S1 domain (Val16-Arg685, D614G) with C-terminus His-Avi tag was expressed in CHO Cells. This protein was site-specifically labeled with Biotin by BirA ligase.

Molecular Weight: This protein has a predicted molecular weight of 78.8 kDa. Under DTT-reducing conditions, the protein migrates at approximately 90-120 kDa on SDS-PAGE.

Affinity Tag: C-His-Avi

Purity: >90% based on SDS-PAGE under reducing condition

Formulation: 1xPBS buffer, pH7.4, 0.22 µm filtered

Endotoxin level: Not tested

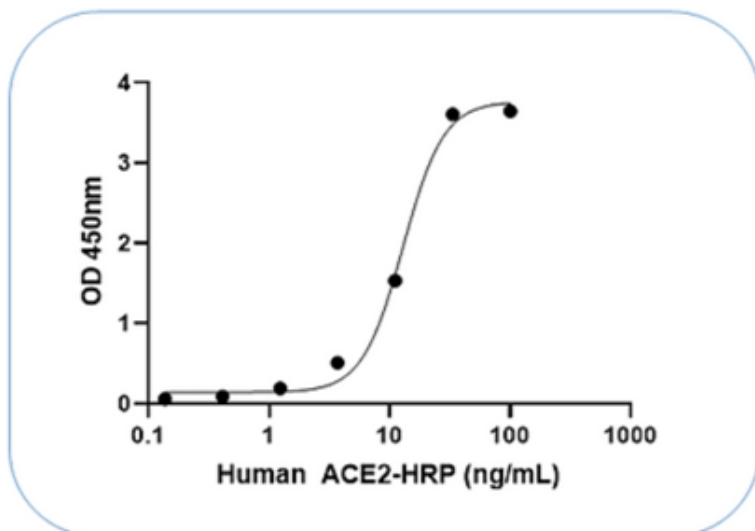
Protein Concentration: 25µg size is bottled at 0.2mg/mL concentration. 100 µg size is supplied at a lot-specific concentration.

Storage and Handling: Briefly centrifuge the vial upon receipt. An unopened vial can be stored at 4°C for up to 2 weeks, or at -20°C or below for up to six months. The protein may be further diluted to 0.1 mg/mL using 0.22 µm-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at ≤ -70°C to minimize freeze-thaw cycles. If additional dilution is required, carrier proteins such as FBS or BSA should be added to maintain protein stability.

Background Information

The S1 domain of the SARS-CoV-2 spike (S) protein is the N-terminal portion responsible for host cell recognition. It is one of two major subunits of the spike protein—the other being the S2 domain, which mediates membrane fusion. The S1 domain contains two key regions N-terminal domain (NTD) and Receptor-binding domain (RBD). Due to its central role in viral attachment and its immunogenicity, the S1 domain is a key target for neutralizing antibodies, vaccines, and diagnostic assays. The D614G mutation is a key amino acid change in the S1 domain of the SARS-CoV-2 spike (S) protein. Although the mutation is located outside of RBD region, this mutation affects the binding affinity to ACE2.

Product Data



Biotinylated SARS-CoV2 S1 Protein (D614G) (C-His-Avi) is coated at 2 µg/mL (200 ng/well). HRP labeled human ACE2 (N-His) protein (catalog # 600005) can bind SARS-CoV2 S1 Protein (D614G) (C-His-Avi) in the dose dependent manner.