

21-1014: SARS-CoV-2 Spike S1 D614G Stable Trimer Recombinant His Protein

Application : ELISA
Uniprot ID : P0DTC2

Description

Full-length soluble SARS-CoV-2 Spike protein (aa 16-1213) including a foldon trimerization motif, mutated Furin recognition site (R682S, R685S) and two stabilizing mutations (K986P and V987P) is fused at the C-terminus to a His-tag.

Source: Expressed in HEK-293 cells.

Reconstitution: Reconstitute with 250µl endotoxin-free water.

Concentration: 0.2mg/ml after reconstitution.

Background: The spike S1 protein of SARS-CoV-2 attaches the virus to its cellular receptor, angiotensin-converting enzyme 2 (ACE2). A defined receptor-binding domain (RBD) on S1 mediates this interaction. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity.

Product Info

Amount : 50 µg
Purification : >90% by SDS-PAGE.
Content : SARS-CoV-2 Spike S1 D614G Stable Trimer Recombinant His Protein lyophilized with PBS and 0.5% trehalose.
Storage condition : Shipped on ice packs. Upon arrival, Store at -20°C. Do not freeze-thaw multiple times. For maximum product recovery after thawing, centrifuge the vial before opening the cap.
Amino Acid : The target protein is expressed with sequence (aa 16-1213) including a foldon trimerization motif, mutated Furin recognition site (R682S, R685S) and two stabilizing mutations (K986P and V987P) is fused at the C-terminus to a His-tag.

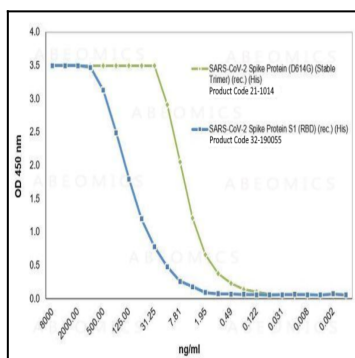


Figure 1: Full-length trimeric SARS-CoV-2 Spike (Cat. No. 21-1014) binds to its receptor, Human ACE2 Protein, FLAG Tag (Cat. No. 32-190010), with high affinity. Method: SARS-CoV-2 Spike S1 D614G Stable Trimer Recombinant His Protein (Cat. No. 21-1014) or SARS-CoV-2 Spike Protein S1 RBD recombinant His protein (Cat. No. 32-190055) are coated at 50nM overnight at 4°C. Human ACE2 Protein, FLAG Tag (Cat. No. 32-190010) is added (starting at a concentration of 8000 ng/ml with a twofold serial dilution) during one hour at RT and the interaction is then detected using an anti-Flag (HRP).

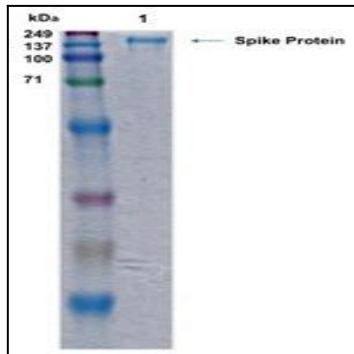


Figure 2: SDS-PAGE: Coomassie staining under non-reducing conditions, showing one clear band at ~190kDa and confirming purity of the protein.

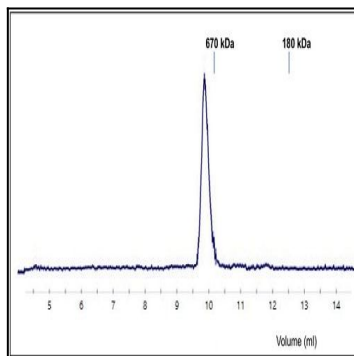


Figure 3: SARS-CoV-2 Spike S1 D614G Stable Trimer Recombinant His Protein (Cat. No. 21-1014) migrates by Size Exclusion Chromatography (SEC) as a single peak. Method: SARS-CoV-2 Spike S1 D614G Stable Trimer Recombinant His Protein has been injected in a SEC column ENrich SEC 650 10 x 300 mm (Bio-Rad).