Certificate of Analysis & Data Sheet

Catalog Number: 230-30213

Recombinant SARS-CoV-2 S1 Subunit Protein RBD, R346K/E484K/N501Y mutant

Source

Species	SARS-CoV-2 Mu B.1.621 (Colombia)
Accession Number	QHD43416
Gene Symbol	S
Expressed Region	Arg319-Phe541. R346K/E484K/N501Y mutant: amino acid Arg (R) at 346 position was mutated to Lys (K), Glu (E) at 484 position was mutated to Lys (K), Asn (N) at 501 position was mutated to Tyr (Y).
Synonyms	Spike protein, S Protein, S1 Subunit, Host Cell Receptor Binding Domain (RBD)

Preparation

Expression System	Human embryonic kidney 293 (HEK293) cells
Tag	C-terminal his-tag
Purification	His-tag affinity purification by immobilized metal ion affinity chromatography (IMAC)
Purity	>95%
Purity Determined By	SDS-PAGE under reducing conditions and visualized by Coomassie blue staining
Molecular Weight	Recombinant protein product has a calculated molecular mass of ~25 kDa. Due to the abundant glycosylation, it migrates as approximately ~30 kDa protein bands in SDS-PAGE under DTT, beta-mercaptoethanol reducing conditions. After deglycosylation under native and denature conditions, the protein presented as one reduced ~25 kDa band.

Protein Specifications

Format	Liquid
Formulation	Supplied as a 0.2 um filtered solution in PBS (pH 7.4)
Concentration	Lot specific (see the label on the vial), determined by BCA protein assay
Endotoxin Level	0.5 EU per µg of the protein as determined by the LAL method
Recommended Applications	Functional Assay, Protein-protein Interaction, Post-translational Modifications, ELISA, EIA, Western Blotting, Dot Blotting, Immunoprecipitation, Protein Array, etc.

SDS-PAGE Image

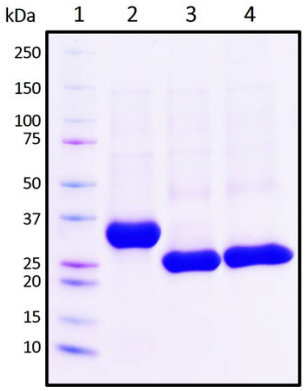

Figure 1. Deglycosylation analysis of purified recombinant proteins. The same amount of purified proteins were untreated (Lane 2) or treated with protein deglycosylation enzymes under native (Lane 3) or reducing (Lane 4) conditions. Deglycosylation treatment resulted in a mobility shift of the protein to produce one reduced band at the expected size, thus indicating that the untreated recombinant protein (Lane 2) was glycosylated.
Lane 1: Protein standard ladder (kDa).
Lane 2: Untreated protein
Lane 3: Treated protein with deglycosylation enzymes under native conditions.
Lane 4: Treated protein with deglycosylation enzymes under reducing conditions.

Shipping

Ice packs

Storage/Stability

Upon arrival, the protein may be stored for 2 weeks at 4 °C. For long term storage, it is recommended to store at -20 °C or -80 °C in appropriate aliquots. Avoid repeated freeze-thaw cycles.