Recombinant SARS-CoV-2 Spike S1 Subunit Protein, CendR Domain

Source

- **Species** SARS-CoV-2
- **Gene Symbols** S
- **Accession Number** QHD43416
- **Expressed Region** Asn542-Arg685
- **Synonyms** Spike protein, S Protein, S1 Subunit, CendR Domain

Preparation

- **Expression System** Human embryonic kidney 293 (HEK293) cells
- **Tag** *N*-terminal his-tag
- **Purification** His-tag affinity purification by immobilized metal ion affinity chromatography (IMAC)
- **Purity** >95%
- **Endotoxin** < 0.5 EU per µg of the protein as determined by the LAL method
- **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 ~18 kDa. Due to the abundant glycosylation, it migrates as approximately ~25-35 kDa protein smear bands in SDS-PAGE under DTT, beta-mercaptoethanol reducing conditions. After deglycosylation under native and denature conditions, the protein presented as one reduced ~18 kDa band. See deglycosylation analysis image below.

Protein Specifications

- **Format** Liquid
- **Formulation** Supplied as a 0.2 µm filtered solution in PBS (pH 7.4)
- **Concentration** Lot specific (see the label on the vial), determined by BCA protein assay
- **SDS-PAGE Image**

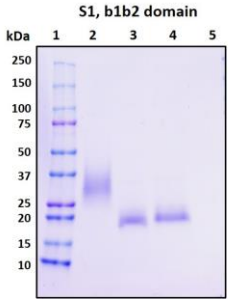

Figure 1. Deglycosylation analysis of purified recombinant proteins. The same amount of purified proteins were untreated (Lane 2) or treated with protein deglycosylation enzymes under native (Lane 3) or reducing (Lane 4) conditions. Deglycosylation treatment resulted in a mobility shift of the protein to produce one reduced band at the expected size (~18 kDa), 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 denature conditions; **Lane 5**: deglycosylation enzymes only without target proteins.

Shipping

The product is shipped with 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.