

PRODUCT DATA SHEET

Bioworld Technology,Inc.

Spike mutant protein:F342A,recombinant(hFc Tag)

Catalog: NCP0122 Type: SARS-CoV-2 Source: 293F

BackGround:

The cause of the COVID-19 pandemic is a novel and highly pathogenic coronavirus, termed SARS-CoV-2 (seacute respiratory syndrome coronavirus-2). SARS-CoV-2 is a member of the Coronaviridae family of viruses (1). The genome of SARS-CoV-2 is similar to other coronaviruses, and is comprised of four key structural proteins: S, the spike protein, E, the envelope protein, M, the membrane protein, and N, the nucleocapsid protein (2). Coronavirus spike proteins are class I fusion proteins and harbor an ectodomain, a transmembrane domain, and an intracellular tail. The highly glycosylated ectodomain projects from the viral envelope surface and facilitates attachment and fusion with the host cell plasma membrane. The ectodomain can be further subdivided into host receptor-binding domain (RBD) (S1) and membrane-fusion (S2) subunits, which are produced upon proteolysis by host proteases at S1/S2 and S2' sites. S1 and S2 subunits remain associated after cleavage and assemble into crown-like homotrimers. In humans, both SARS-CoV and SARS-CoV-2 spike proteins utilize the angiotensin-converting enzyme 2 (ACE2) protein as a receptor for cellular entry. Spike protein subunits represent a key antigenic feature of coronavirus virions, and therefore represent an important target of vaccines, novel

therapeutic antibodies, and small-molecule inhibitors.

Product:

PBS,pH7.4

Size:

100ug/1mg

Swiss-Prot:

P0DTC2

Purification&Purity:

The protein was purified from 293F and the purity is > 95% (by SDS-PAGE).

Applications:

The protein has a calculated MW of 50 kDa.

Storage&Stability:

Store at $4 \, \mathbb{C}$ short term. Aliquot and store at $-20 \, \mathbb{C}$ long term. Avoid freeze-thaw cycles.

Protein length:

AA Thr 333 - Pro 527 (Accession # P0DTC2)

DATA:

Note:

For research use only, not for use in diagnostic procedure.

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