

## Recombinant COVID-19 Spike S1 (H49Y, YH145-146 deletion, E484K, D614G) protein(Met1-Arg685), His-tagged

**Cat. No.** Spike-1245V    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                          |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant SARS-CoV-2 Spike S1 (YP_009724390.1, with mutations H49Y, YH145-146 deletion, E484K, D614G) (Met1-Arg685) was expressed in HEK293 with a polyhistidine tag at the C-terminus. The mutations were identified in the SARS-CoV-2 variant (known as variant B.1.618) which emerged in the India. |
| <b>Species</b>          | Sars-CoV-2                                                                                                                                                                                                                                                                                               |
| <b>Source</b>           | HEK293                                                                                                                                                                                                                                                                                                   |
| <b>ProteinLength</b>    | Met1-Arg685                                                                                                                                                                                                                                                                                              |
| <b>Form</b>             | Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.                                                                                                                                                           |
| <b>Bio-activity</b>     | Immobilized ACE2 Protein, Human, Recombinant (mFc Tag) at 2 µg/mL (100 µL/well) can bind SARS-CoV-2 Spike S1 (H49Y, YH145-146 deletion, E484K, D614G) Protein (His Tag), the EC50 of SARS-CoV-2 Spike S1 (H49Y, YH145-146 deletion, E484K, D614G) Protein (His Tag) is 120-600 ng/mL.                    |
| <b>Molecular Mass</b>   | The recombinant SARS-CoV-2 Spike S1 consists of 681 amino acids and predicts a molecular mass of 76.5 kDa. As a result of glycosylation, it migrates as an approximately 107.9 kDa band in SDS-PAGE under reducing conditions.                                                                           |
| <b>Endotoxin</b>        | < 1.0 EU per µg protein as determined by the LAL method.                                                                                                                                                                                                                                                 |

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|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purity</b>         | > 90 % as determined by SDS-PAGE.                                                                                                                                                                                                               |
| <b>Storage</b>        | Samples are stable for up to twelve months from date of receipt at -20°C to -80°C. Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. |
| <b>Reconstitution</b> | It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.                                                                   |

## GENE INFORMATION

|                        |                                                                                           |
|------------------------|-------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | S surface glycoprotein [ Severe acute respiratory syndrome coronavirus 2 ]                |
| <b>Official Symbol</b> | Spike                                                                                     |
| <b>Synonyms</b>        | Spike; S1 protein; Spike glycoprotein Subunit1; S glycoprotein Subunit1; Spike protein S1 |
| <b>Gene ID</b>         | 43740568                                                                                  |
| <b>Protein Refseq</b>  | YP_009724390.1                                                                            |
| <b>UniProt ID</b>      | P0DTC2                                                                                    |

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