

## Active Recombinant COVID-19 Spike RBD protein(BA.4.6/BF.7/Omicron), His-tagged(VLPs)

**Cat. No.** Spike-776V    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                    |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant COVID-19 Spike RBD protein(BA.4.6/BF.7/Omicron)(YP_009724390.1, with mutation G339D, R346T, S371F, S373P, S375F, T376A, D405N, R408S, K417N, N440K, L452R, S477N, T478K, E484A, F486V, Q498R, N501Y, Y505H) (Arg319-Phe541) was expressed in HEK293, fused with a polyhistidine tag at the C-terminus. |
| <b>Species</b>          | Sars-CoV-2                                                                                                                                                                                                                                                                                                         |
| <b>Source</b>           | HEK293                                                                                                                                                                                                                                                                                                             |
| <b>ProteinLength</b>    | Arg319-Phe541                                                                                                                                                                                                                                                                                                      |
| <b>Form</b>             | Lyophilized from sterile PBS, pH 7.4.<br>Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.                                                                                                                                                                  |
| <b>Bio-activity</b>     | Immobilized human ACE2 protein (Fc tag) at 2 µg/mL (100 µL/well) can bind Recombinant SARS-CoV-2 (BA.4.6/BF.7) Spike RBD Protein (His Tag), the EC50 is 19-65 ng/mL.                                                                                                                                               |
| <b>Molecular Mass</b>   | The recombinant SARS-CoV-2 Spike RBD consists of 234 amino acids and predicts a molecular mass of 26.62 kDa. As a result of glycosylation, it migrates as an approximately 33.27 kDa band in SDS-PAGE under reducing conditions.                                                                                   |

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|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Endotoxin</b>      | < 1.0 EU per µg protein as determined by the LAL method.                                                                                                                                                                                                                                      |
| <b>Purity</b>         | > 95 % as determined by SDS-PAGE. > 95 % as determined by SEC-HPLC.                                                                                                                                                                                                                           |
| <b>Storage</b>        | Samples are stable for up to twelve months from date of receipt at -20°C to -80°C<br>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 to reconstitute the lyophilized powder in sterile water to 100-200 µg/ml, and further dilute with other solvents. The dissolved protein can be stored at 4°C for 2-7 days and should be used up as soon as possible. If not in use for a short time, please store at -20°C. |

## GENE INFORMATION

|                        |                                                                                                             |
|------------------------|-------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | S surface glycoprotein [ Severe acute respiratory syndrome coronavirus 2 ]                                  |
| <b>Official Symbol</b> | S                                                                                                           |
| <b>Synonyms</b>        | Spike; S1 protein; Spike glycoprotein Subunit1; S glycoprotein Subunit1; Spike protein S1; COVID-19 Omicron |
| <b>Gene ID</b>         | 43740568                                                                                                    |
| <b>Protein Refseq</b>  | YP_009724390.1                                                                                              |
| <b>UniProt ID</b>      | P0DTC2                                                                                                      |

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