

# Active Recombinant SARS-CoV-2 (2019-nCoV) Spike RBD(N501Y) Protein, His-tagged

**Cat. No.** S-437S    **Lot. No.** (See product label)

## SPECIFICATION

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b>     | Recombinant SARS-CoV-2 (2019-nCoV) Spike RBD(N501Y)-His Recombinant Protein (YP_009724390.1) (Arg319-Phe541(N501Y)) was expressed in HEK293 cell with a polyhistidine tag at the C-terminus.                                                                                                                                                                                                                                                                                                       |
| <b>Species</b>              | SARS-CoV-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Source</b>               | HEK293                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>ProteinLength</b>        | 319-541                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Predicted N Terminal</b> | Arg 319                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Bio-activity</b>         | <p>1. Measured by its binding ability in a functional ELISA. Immobilized human ACE2 protein (mFc tag) at 2 µg/mL (100 µL/well) can bind SARS-CoV-2 (2019-nCoV) Spike RBD(N501Y)-His, the EC50 of SARS-CoV-2 (2019-nCoV) Spike RBD(N501Y)-His is 3-20 ng/mL.</p> <p>2. Loaded ACE2 Protein, Human, Recombinant (mFc Tag) on AMC Biosensor, can bind SARS-CoV-2 (2019-nCoV) Spike RBD(N501Y)-His Recombinant Protein with an affinity constant of 0.827 nM as determined by Octet RED96e system.</p> |
| <b>Molecular Mass</b>       | The recombinant SARS-CoV-2 (2019-nCoV) Spike RBD(N501Y)-His Recombinant Protein consists of 234 amino acids and predicts a molecular mass of 26.6 kDa. As a result of glycosylation, it migrates as an approximately 35 kDa band in SDS-PAGE under reducing conditions.                                                                                                                                                                                                                            |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                       |                                                                                                                                                                                                                                                                             |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Endotoxin</b>      | < 1.0 EU/μg protein as determined by the LAL method.                                                                                                                                                                                                                        |
| <b>Purity</b>         | > 95 % as determined by SDS-PAGE.                                                                                                                                                                                                                                           |
| <b>Storage</b>        | <p>Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade.</p> <p>Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.</p> |
| <b>Storage Buffer</b> | <p>Lyophilized from sterile PBS, pH 7.4.</p> <p>Please contact us for any concerns or special requirements.</p> <p>Normally 5 % - 8 % trehalose, mannitol and 0.01 % Tween80 are added as protectants before lyophilization.</p>                                            |

## GENE INFORMATION

|                        |                                                                                                      |
|------------------------|------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | S surface glycoprotein [ Severe acute respiratory syndrome coronavirus 2 ]                           |
| <b>Official Symbol</b> | S                                                                                                    |
| <b>Synonyms</b>        | S; surface glycoprotein; spike glycoprotein; surface glycoprotein; structural protein; spike protein |
| <b>Gene ID</b>         | 43740568                                                                                             |
| <b>mRNA Refseq</b>     | MN908947                                                                                             |
| <b>Protein Refseq</b>  | YP_009724390                                                                                         |
| <b>Activity</b>        |                                                                                                      |
| <b>SDS-PAGE</b>        |                                                                                                      |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA