

# COVID 19 Spike RBD (R346K, E484K, N501Y) Coronavirus Recombinant Protein | COVID-19 recombinant protein

2019-nCoV Spike protein RBD (R346K, E484K, N501Y)

|                              |                          |
|------------------------------|--------------------------|
| CATALOG #<br><b>AAA73342</b> | HOST<br><b>CHO cells</b> |
|------------------------------|--------------------------|

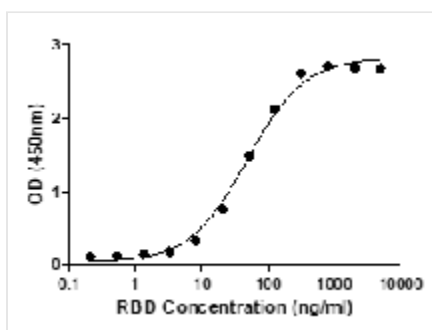
## PRODUCT SYNONYMS

COVID 19 Spike RBD (R346K; E484K; N501Y) Coronavirus; 2019-nCoV Spike protein RBD (R346K; N501Y); 2019 Novel Coronavirus; Coronavirus; CoV; COVID-19 virus; HCoV-2; Human Coronavirus 2019; SARS2; SARS-CoV-2; Severe acute respiratory syndrome coronavirus 2; Spike RBD (R346K; 2019-nCoV RBD; SARS-CoV-2 spike RBD; novel coronavirus spike RBD; nCoV spike RBD; SARS-CoV-2 Mu variant; COVID-19 recombinant protein

## PRODUCT SPECIFICATIONS

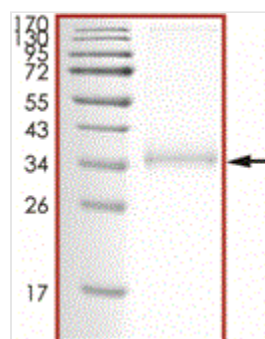
|                         |                                                                                                                                                                                                                                                |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                    | CHO cells                                                                                                                                                                                                                                      |
| Form/Format             | Recombinant protein stored in 50mM sodium phosphate, pH7.5, 300mM NaCl, 150mM imidazole.                                                                                                                                                       |
| Concentration           | 1.0ug/ul (varies by lot)                                                                                                                                                                                                                       |
| Tag                     | HIS                                                                                                                                                                                                                                            |
| Species                 | Human                                                                                                                                                                                                                                          |
| Dry Ice Note            | The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.                                                                                                                                             |
| Preparation and Storage | Store product at -70 degree C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles. |

## IMAGES



### Bioactivity

Activity: Sample activity data. For lot specific data please refer to the specific datasheet.



### SDS-PAGE

Purity: Sample purity data. for lot-specific data, please refer to the respective data.

## ADDITIONAL INFORMATION

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|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Related Product Information for COVID-19 recombinant protein</b> | <p>Recombinant 2019-nCoV Spike protein S1 subunit, RBD (R346K, E484K, N501Y) was expressed in CHO cells using a C-terminal his tag. The gene accession number is MN908947.</p> <p>The B.1.621 variant emerged from the parental B.1 lineage and was first found in Colombia in January 2021. The World Health Organization (WHO) designated the B.1.621 variant as Mu and classified it as a variant of interest (VOI) in August 2021 (1). The Mu variant (lineage: B.1.621) carries the mutations R346K, E484K, and N501Y on its RBD and the mutations manifest resistance to antiviral immunity. Compared to Delta, the Mu variant shows enhanced immune resistance to antibodies, and the E484K mutation, an escape mutation, is considered to be the reason for reducing the neutralizing ability of antibodies (2). As more variants of the virus emerge, it is pivotal to study the transmissibility, virulence, and their possible tendency to escape antibody neutralization of the virus (3).</p> |
| <b>Product Categories/Family for COVID-19 recombinant protein</b>   | <a href="#">COVID-19 Proteins</a> ; <a href="#">COVID19</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>References</b>                                                   | <ol style="list-style-type: none"><li>1. Xiaochun, X et al: Emerging SARS-CoV-2 B. 1.621/Mu variant is prominently resistant to inactivated vaccine-elicited antibodies. Zoological Research. 2021, doi: 10.24272/zj.issn.2095-8137.2021.343</li><li>2. Harvey, W.T, et al. SARS-CoV-2 variants, spike mutations and immune escape. Nat Rev Microbiol. 2021, 19: 409-424.</li><li>3. Starr TN, et al: Molecular dynamic simulation reveals E484K mutation enhances spike RBD-ACE2 affinity and the combination of E484K, K417T and N501Y mutations (501Y.V2 variant) induces conformational change greater than N501Y mutant alone, potentially resulting in an escape mutant. Cell. 2020, 182(5):1295-1310.</li></ol>                                                                                                                                                                                                                                                                                     |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/covid-19-spike-rbd-r346k-e484k-n501y-coronavirus-recombinant-protein-cho-cells/73342>