

COVID 19 spike RBD (E484K) Coronavirus Recombinant Protein | COVID-19 recombinant protein

2019-nCoV spike protein RBD (E484K)

CATALOG # AAA73348	HOST CHO cells
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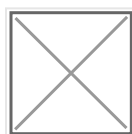
PRODUCT SYNONYMS

COVID 19 spike RBD (E484K) Coronavirus; 2019-nCoV spike protein RBD (E484K); 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 (E484K); 2019-nCoV RBD; SARS-CoV-2 spike RBD; novel coronavirus spike RBD; nCov spike RBD.; COVID-19 recombinant protein

PRODUCT SPECIFICATIONS

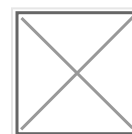
Host	CHO cells
Form/Format	Recombinant protein stored in 50mM sodium phosphate, pH7.5, 300mM NaCl, 150mM imidazole.
Concentration	1.0ug/ul (determined by densitometry) (varies by lot)
Tag	HIS
Species	SARS-CoV-2
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to 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



SDS-PAGE

Purity: Sample purity data. For lot-specific data, please refer to the specific datasheet.



Activity

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

ADDITIONAL INFORMATION

Related Product Information for COVID-19 recombinant protein	Recombinant 2019-nCoV Spike protein S1 subunit, RBD (E484K)(319-541) was expressed in CHO cells using a C-terminal his tag. The gene accession number is MN908947. The receptor binding domain (RBD) of the SARS-CoV-2 spike glycoprotein that recognizes the host ACE2 receptor is a major determinant of viral entry and neutralization, and is the most divergent region (1). Substitution of glutamate (E) to Lysine (K) at position 484 (E484K) in the RBD of the spike protein has been reported in the B.1.1.351 and P.1 lineages. Viruses harboring E484K mutation have reduced susceptibility to human convalescent plasma and vaccinated individuals (2). As these new variants displace the first-wave virus, it is pivotal to evaluate their transmissibility, virulence and their possible tendency to escape antibody neutralization (3).
Product Categories/Family for COVID-19 recombinant protein	COVID-19 Proteins; Acute Respiratory Distress Syndrome; Cardiovascular Disease; Cell Cycle; Cellular Stress; COVID19; Gastrointestinal Diseases; Infectious Diseases; Inflammation; Lung Diseases; Metabolic Disorder; Neurobiology; severe acute respiratory s

References

1. Lan J, et al: Crystal structure of the 2019-nCov spike receptor-binding domain bound with the ACE2 receptor. bioRxiv. doi: <https://doi.org/10.1101/2020.02.19.956235>.
2. Jangra S, et al: The E484K mutation in the SARS-CoV-2 spike protein reduces but does not abolish neutralizing activity of human convalescent and post-vaccination sera.. medRxiv [Preprint]. 2021 Jan 29:2021.01.26.21250543. doi: 10.1101/2021.01.26.21250543.
3. Starr TN, et al: Molecular dynamic simulation reveals E484K mutation enhances spike RBD-ACE2 affinity and the combination of E484K, K417N 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.

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-e484k-coronavirus-recombinant-protein-cho-cells/73348>