

COVID 19 Spike RBD Coronavirus Active Protein | COVID-19 active protein

SARS-CoV-2 (2019-nCoV) Spike Protein (RBD, mFc Tag)

CATALOG #
AAA268892

HOST
HEK293 CellsSource: 2019nCoV

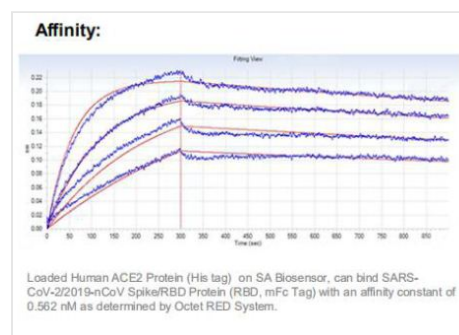
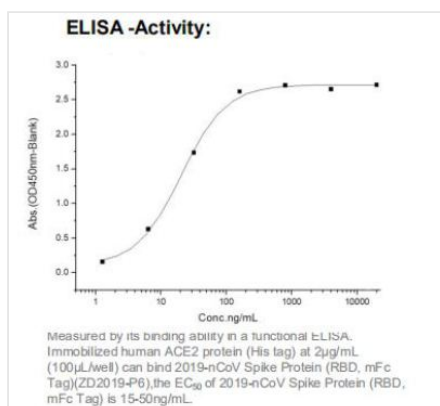
PRODUCT SYNONYMS

COVID 19 Spike RBD Coronavirus; SARS-CoV-2 (2019-nCoV) Spike Protein (RBD, mFc Tag); 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; Receptor Binding Domain; COVID-19 active protein

PRODUCT SPECIFICATIONS

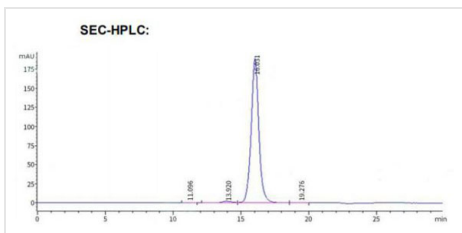
Host	HEK293 Cells Source: 2019nCoV
Purity/Purification	>95% as determined by SDS-PAGE. 95% as determined by SEC-HPLC
Form/Format	Liquid or lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Predicted N terminal	Arg 319
Biological Activity	1. Measured by its binding ability in a functional ELISA. Immobilized human ACE2 protein(His tag) at 2 u g/mL (100 u L/well) can bind SARS-CoV-2 (2019-nCoV) Spike Protein (RBD, mFcTag)(ZD2019-P6), the EC ₅₀ of SARS-CoV-2 (2019-nCoV) Spike Protein (RBD, mFc Tag) is 15-50ng/mL. 2. Loaded Human ACE2 Protein (His tag) on SA Biosensor, can bind SARS-CoV-2/2019-nCoV Spike/RBD Protein (RBD, mFc Tag) with an affinity constant of 0.562 nM as determined by Octet REDSystem.
Protein Construction	A DNA sequence encoding the SARS-CoV-2 (2019-nCoV) Spike Protein (RBD)(YP_009724390.1) (Arg319-Phe541) was expressed with the Fc region of mouse IgG1 at the C-terminus.
Molecular Mass	The recombinant SARS-CoV-2 (2019-nCoV) Spike Protein (RBD, mFc Tag) consists of 457 amino acids and predicts a molecular mass of 51.5 kDa.
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	Samples are stable for twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage. Avoid repeated freeze-thaw cycles.

IMAGES

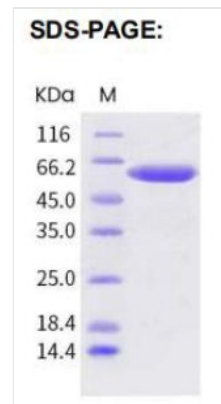


Application Data

Application Data



Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for COVID-19 active protein

Description:

The spike (S) glycoprotein of coronaviruses contains protrusions that will only bind to certain receptors on the host cell. Known receptors bind S1 are ACE2, angiotensin-converting enzyme 2; DPP4, dipeptidyl peptidase-4; APN, aminopeptidase N; CEACAM, carcinoembryonic antigen-related cell adhesion molecule 1; Sia, sialic acid; O-ac Sia, O-acetylated sialic acid. The spike is essential for both host specificity and viral infectivity. The term 'peplomer' is typically used to refer to a grouping of heterologous proteins on the virus surface that function together. The spike (S) glycoprotein of coronaviruses is known to be essential in the binding of the virus to the host cell at the advent of the infection process. It's been reported that 2019-nCoV can infect the human respiratory epithelial cells through interaction with the human ACE2 receptor.

References

References:

1. Shen S, et al. (2007) Expression, glycosylation, and modification of the spike (S) glycoprotein of SARS-CoV. *Methods Mol Biol.* 379: 127-35.
2. Du L, et al. (2009) The spike protein of SARS-CoV--a target for vaccine and therapeutic development. *Nat Rev Microbiol.* 7 (3): 226-36.
3. Xiao X, et al. (2004) The SARS-CoV S glycoprotein. *Cell Mol Life Sci.* 61 (19-20): 2428-30.

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/hek293-cells-covid-19-active-protein/covid-19-spike-rbd-coronavirus/268892>