

Datasheet for ABIN7013267

SARS-CoV-2 Spike Protein (N501Y, RBD) (His tag)

3 Images

1 Publication

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Overview

Quantity:	100 µg
Target:	SARS-CoV-2 Spike
Protein Characteristics:	N501Y, RBD
Origin:	SARS Coronavirus-2 (SARS-CoV-2)
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This SARS-CoV-2 Spike protein is labelled with His tag.

Product Details

Sequence:	AA 319-537
Specificity:	SARS-CoV-2 (COVID-19) S protein RBD (N501Y), His Tag (MALS verified)
Characteristics:	SARS-CoV-2 S protein RBD (N501Y), His Tag is expressed from human 293 cells (HEK293). It contains AA Arg 319 - Lys 537 (Accession # QHD43416.1(N501Y). N501Y mutation was identified in both the SARS-CoV-2 variant (known as 20B/501Y.V1, VOC 202012/01, or B.1.1.7 lineage) which emerged in the United Kingdom and SARS-CoV-2 variant (known as 20C/501Y.V2 or B.1.351 lineage) which emerged in South Africa.
Purity:	>95 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	SARS-CoV-2 Spike
Alternative Name:	SARS-CoV-2 S protein (SARS-CoV-2 Spike Products)
Target Type:	Viral Protein
Background:	It's been reported that SARS-CoV-2 can infect the human respiratory epithelial cells through interaction with the human ACE2 receptor. The spike protein is a large type I transmembrane protein containing two subunits, S1 and S2. S1 mainly contains a receptor binding domain (RBD), which is responsible for recognizing the cell surface receptor. S2 contains basic elements needed for the membrane fusion. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity.
Molecular Weight:	26.6 kDa

Application Details

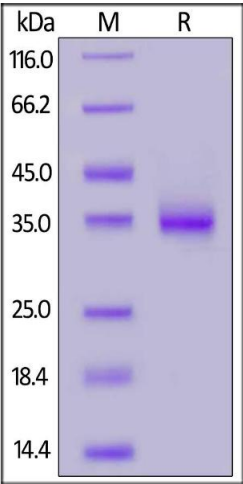
Application Notes:	MALS verified
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	PBS, pH 7.4
Storage:	-20 °C

Publications

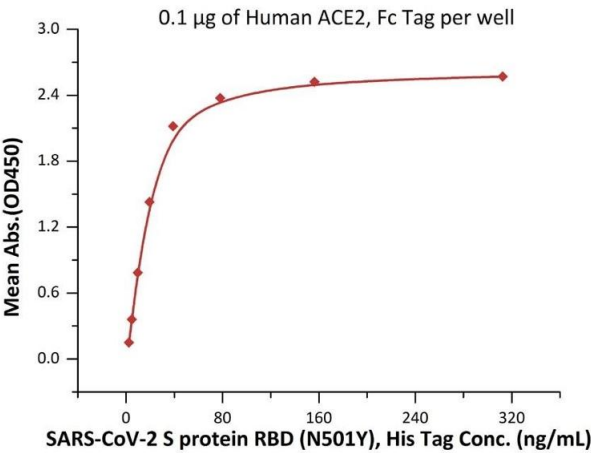
Product cited in:	Longworth, Dittmar: "An antigen microarray protocol for COVID-19 serological analysis." in: STAR protocols , Vol. 2, Issue 3, pp. 100815, (2021) (PubMed).
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SDS-PAGE

Image 1. SARS-CoV-2 S protein RBD (N501Y), His Tag on under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95 % .

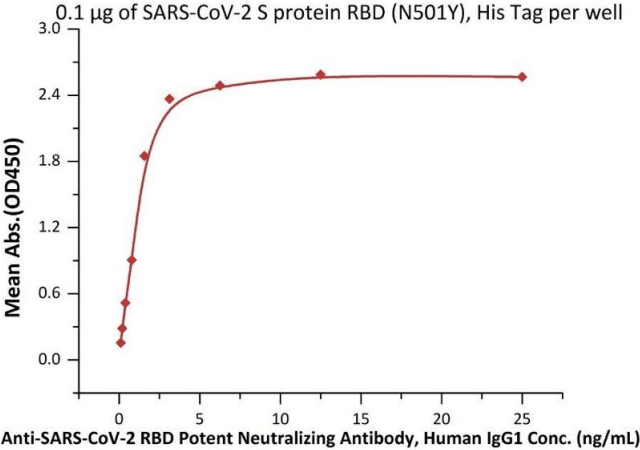
SARS-CoV-2 S protein RBD (N501Y), His Tag ELISA



ELISA

Image 2. Immobilized Human ACE2, Fc Tag (ABIN6952459,ABIN6952465) at 1 µg/mL (100 µL/well) can bind SARS-CoV-2 S protein RBD (N501Y), His Tag (ABIN6973223) with a linear range of 2-39 ng/mL (QC tested).

SARS-CoV-2 S protein RBD (N501Y), His Tag ELISA



ELISA

Image 3. Immobilized SARS-CoV-2 S protein RBD (N501Y), His Tag (ABIN6973223) at 1 µg/mL (100 µL/well) can bind A-CoV-2 RBD Potent Neutralizing Antibody, Human IgG1 with a linear range of 0.1-3 ng/mL (Routinely tested).