

Spike S1 Protein (SARS-CoV-2/COVID-19)

CATALOG NUMBER: SCV2-S1-150P, 50 µg, 1 mg

Introduction

The novel coronavirus (SARS-CoV-2), previously called 2019-nCoV, is a newly identified coronavirus causing the ongoing outbreak of atypical pneumonia in Wuhan China from late 2019. The genome of SARS-CoV-2 has 89% nucleotide identity with bat SARS-like-CoVZXC21 and 82% with that of human SARS-CoV. The phylogenetic trees of their orf1a/b, Spike, Envelope, Membrane and Nucleocapsid protein also clustered closely with those of the bat, civet and human SARS coronaviruses. However, the external subdomain of Spike's receptor binding domain (RBD) of SARS-CoV-2 shares only 40% amino acid identity with other SARS-related coronaviruses.

Description

Recombinant spike S1 protein (amino acid 19-676) of human SARS-CoV-2 (GenBank Accession No. MN908947) with a C-terminal poly His-tag, purified from 293 cells

Applications

Western blot standard, antibody ELISA, antigen, etc.

Storage

Store at -20 °C; Stable for 6-months from the date of shipment when kept at 4 °C. Non-hazardous.

Concentration

1 µg/µl in PBS, pH7.4

Endotoxin Level

<0.01 EU per 1 µg of the protein by LAL test

Purity

≥ 95% (by SDS PAGE)

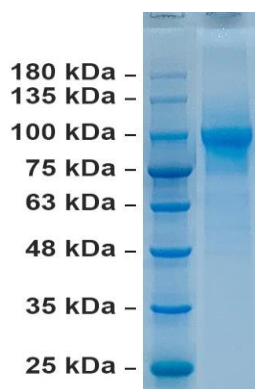


Figure 1. SDS-PAGE. Purified spike S1 protein (SARS-CoV-2/COVID-19)

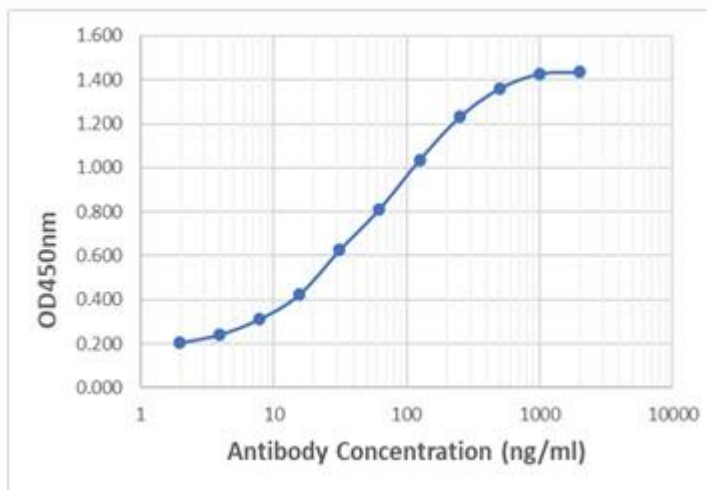


Figure 2. Titration curves of anti-S1 (SARS-CoV-2) human monoclonal antibody. 96-well corning EILSA plate was coated with SARS-CoV-2 spike S1 protein (Cat# SCV2-S1-150P) at a concentration of 1.5 µg/ml.

S1 Protein (aa 19-676)(SARS-CoV-2/COVID-19) SEQ:

TRTRQLPPAYTNSFTRGVYYPDKVFRSSVLHSTQDLFLPFFSNVTWFHAIHVSGTNGTKRFDNPVLPFNDGVYFASTEKSNIIRGWIFGTTLDSKTQSL
LIVNNATNVVIKVECFQFCNDPFLGVYYHKNNKSWMESEFRVYSSANNCTFEYVSQPFLLMDLEGGKQGNFKNLREFVFNKIDGYFKIYSKHTPINLVRDL
PQGFSALEPLVDLPIGINITRFQTLALHRSYLTGPDSSSGWTAGAAAYVGYLQPRFTLLKYNENGTITDAVDCALDPLSETKCTLKSFTVEKGIYQT
SNFRVQPTESIVRFPNITNLCPFGEVFNATRFASVYAWNKRKISNCVADYSVLYNSASFSTFKCYGVSPTKLNLDLFTNVYADSFVIRGDEVQRQIAPGQ
TGKIADYNYKLPDDFTGCVIAWNSNNLDSKVGNGYNYLYRLFRKSNLKPFFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGYQPYRVVVL
SFELLHAPATVCGPKKSTNLVKNKCVNFNFNGLTGTGVLTESNKKFLPFQQFGRDIADTTDAVRDPQTLLEILDITPCSFGGVSVITPGTNTSNQVAVLY
QDVNCTEVPVAIHADQLTPTWRVYSTGSNVFPQTRAGCLIGAELVNNNSYECDIPIGAGICASYQT **HHHHHH**