

Spike Protein of SARS-CoV-2 (COVID-19)

CATALOG NUMBER: SCV2-S-050P, 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.

Applications

Western blot standard, antibody ELISA, antigen, etc.

Description

Recombinant spike (aa 16-1208) protein of SARS-CoV-2 (COVID-19) purified from HEK293 cells

Viral Protein

Spike protein (amino acid 16-1208) of human SARS-CoV-2 (GenBank Accession No. QIC53204) with a C-terminal His-tag

Storage

Store at -20 °C; Stable for 6-months from the date of shipment when kept at 4 °C. Non-hazardous, no MSDS required.

Concentration

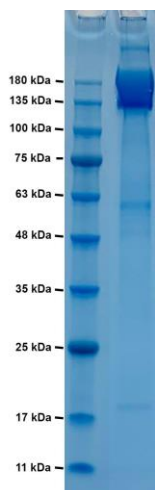
1 µg/µl in PBS, pH7.4

Endotoxin Level

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

Purity

≥ 95% (by SDS PAGE)



SDS-PAGE (4-20%): purified full-length spike (aa 16-1208) protein (SARS-CoV-2)

Spike Protein (aa 16-1208)(SARS-CoV-2/COVID-19) SEQ:

VNLTRTRQLP PAYTNSFTRG VYYPDKVFRS SVLHSTQDLF LPFFSNVTWF HAIHVSGTNG TKRFDNPVLP FNDGVYFAST EKSNIIRGWI
FGTTLDSTQ SLLIVNNATN VVIKVCDFQF CNDPFLGVYY HKNNKSWMES EFRVYSSANN CTFEYVSQPF LMDLEGKQGN FKNLREFVFK
NIDGYFKIYS KHTPINLVRD LPQGFSALEP LVDLPIGINI TRFQTLALH RSYLTPGDSS SGWTAGAAAY YVGYLQPRTF LLKYNENGTI
TDAVDCALDP LSETKCTLKS FTVEKGIYQT SNFRVQPTES IVRFPNITNL CPFGEVFNAT RFASVYAWNR KRISNCVADY SVLYNSASF'S
TFKCYGVSPT KLNDLCFTNV YADSFVIRGD EVRQIAPGQT GKIADYNYKL PDDFTGCVIA WNSNNLDSKV GGNYNLYRL FRKSNLKPFE
RDISTEIQQA GSTPCNGVEG FNCYFPLQSY GFQPTNGVGY QPYRVVLSF ELLHAPATVC GPKKSTNLVK NKCVMFNFNGLTGTGVLTES
NKKFLPFQOF GRDIADTTDA VRDPQLEIL DITPCSFQGV SVITPGTNTS NQVAVLYQDV NCTEVPVAIH ADQLTPTWRV YSTGSNVFQT
RAGCLIGAEH VNNSYECDIP IGAGICASYQ TQTNSPRRAR SVASQSIAY TMSLGAENSV AYSNNSIAIP TNFTISVTTE ILPVSMTKTS
VDCTMYICGD STECSNLLLQ YGSFCTQLNR ALTGIAVEQD KNTQEVFAQV KQIYKTPPIK DCGGFNFSQI LPDPSKPSKR SFIEDLLEFNK
VTLADAGFIK QYGDCLDIA ARDLICAQKF NGLTVLPPLL TDEMIAQYTS ALLAGTITSG WTFGAGAAALQ IPFAMQMAYR FNGIGVTQNV
LYENQKLIAN QFNSAIGKIQ DSLSSTASAL GKLQDVVNQN AQALNTLVKQ LSSNFGAISS VLNDILSRLD KVEAEVQIDR LITGRLQSLQ
TYVTQQLIRA AEIRASANLA ATKMSECVLG QSKRVDFCGK GYHLMSFPQS APHGVVFLHV TYVPAQEKNF TTAPAICHDG KAHFPREGVF
VSNGTHWFVT QRNFYEPQII TTDNTFVSGN CDVVIGIVNN TVYDPLQPEL DSFKEELDKY FKNHTSPDVD LGDISGINAS VVNIQKEIDR
LNEVAKNLNE SLIDLQELGK YEQHSHHHHH