

32-190041: Recombinant SARS-CoV2 S-Protein ACE2 Binding Domain

Application : ELISA

Description

The sequence below is that of our recombinant construct of the SARS-CoV-2 spike or S-protein which includes the entire region which interacts with ACE2. The specific binding to ACE2 is essential for viral internalization and infection. We designed this construct based on amino acids 308-541 in the S-protein sequence in Isolate Wuhan-Hu-1, complete genome. This is a defined globular domain recently shown to include all of the amino acids necessary for ACE2 binding. The construct was expressed in and purified from E. coli and includes an N-terminal His-tag and other vector derived sequence shown underlined below.

Product Info

Amount : 25µg / 50 µg
Content : Supplied as 1mg/mL in 6M urea, 10mM phosphate buffer pH=7.5
Storage condition : Stable at 4°C for several months. For longer term store at -20°C, minimize freeze/thaw cycles
Amino Acid : MHHHHHHSSG LVPRGSGMKE TAAAKFERQH MDSPDLGTDD DDKAMADIGS EFVEKGIYQT 60
 SNFRVQPTES IVRFPNITNL CPFGEVFNAT RFASVYAWNR KRISNCVADY SVLYNSASFS 120
 TFKCYGVSPT KLNDLCFTNV YADSFVIRGD EVRQIAPGQT GKIADYNYKL PDDFTGCVIA 180
 WNSNNLDSKV GGNYNLYRL FRKSNLKPFE RDISTEIQQA GSTPCNGVEG FNCYFPLQSY 240
 GFQPTNGVGY QPYRVVLSF ELLHAPATVC GPKKSTNLVK NKCVNF 286 Number of amino acids: 286
 Molecular weight: 32074.01

Application Note

ELISA

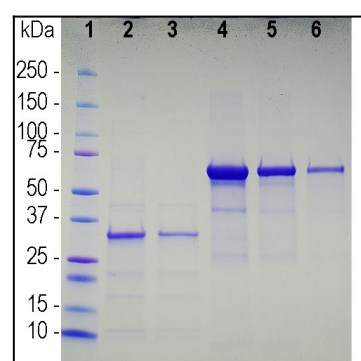


Figure-1: SDS-PAGE gel of recombinant human SARS-CoV-2 cell binding region. Lane 1 shows protein standards of apparent molecular weight as indicated in kiloDaltons. Lanes 2 and 3 are two loadings of the recombinant SARS-CoV-2 binding domain construct, running at about 32kDa as expected. Lanes 4 to 6 are 5.61¼g, 2.83¼g and 1.4¼g of BSA.