

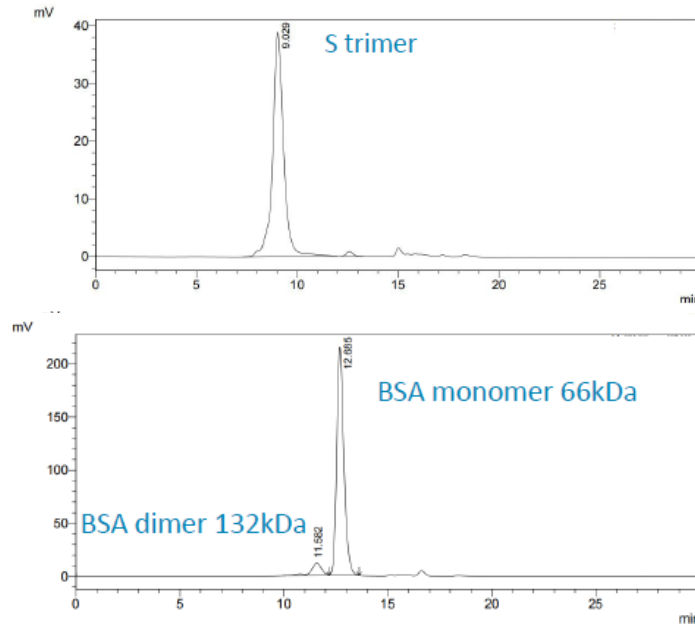
## Recombinant SARS-CoV-2 S-trimer Protein (D614G, C-6His)

Catalog No: DRA59

|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| <b>Description</b>                | Recombinant SARS-CoV-2 S-trimer Protein is produced by our Mammalian expression system and the target gene encoding Cys15-Gln1208(D614G) is expressed with a 6His tag at the C-terminus.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Expression System</b>          | Human cells                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Alternative name</b>           | SARS-CoV-2 S protein; SARS-CoV-2 Spike glycoprotein; SARS-CoV-2 S glycoprotein; SARS-nCoV-2 Spike glycoprotein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Accession No.</b>              | QHD43416.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Predicted Molecular Weight</b> | 136.5kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Apparent Molecular Weight</b>  | 170-220kDa, reducing conditions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Quality Control</b>            | Purity: Greater than 95% as determined by reducing SDS-PAGE; greater than 90% as determined by reducing SEC-HPLC.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Formulation</b>                | Supplied as a 0.2 µm filtered solution of PBS, pH 7.4.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Shipping</b>                   | The product is shipped on dry ice pack.<br>Upon receipt, store it immediately at the temperature listed below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Storage</b>                    | Store at ≤-70°C, stable for 6 months after receipt.<br>Store at ≤-70°C, stable for 3 months under sterile conditions after opening.<br>Please minimize freeze-thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Sequence</b>                   | <p>CVNLTTRTQLPPAYTNSFTRGVYYPDKVFRSSVLHSTQDLFLPFFSNVTWTFHAI</p> <p>HVSGTNGTKRFDNPVLPFNDGVYFASTEKSNIIRGWIFGTTLDSTQSLIVNN</p> <p>ATNVVIKVFCEFCNDPFLGVYYHKNNKSWMESEFRVYSSANNCTFEYVSQPF</p> <p>LMDLEGKQGNFKNLREFVFKNIDGYFKIYSKHTPINLVRDLPQGFSALEPLVDLP</p> <p>IGINITRFQTLALHRSYLT PGDSSSGW TAGAAAYVGYLQPRTFLLKYNENGTI</p> <p>TDAVDCALDPLSEKCTLSFTVEKGIYQTSNFRVQPTESIVRFPNITNLCPFGEV</p> <p>FNATRFASVYAWNKRISNCVADYSVLYNSASFSTFKCYGVSPTKLNDLCFTNV</p> <p>YADSFVIRGDEVQRQIAPGQTGKIADYNYKLPDDFTGCVIAWNSNNLDSKVGGN</p> <p>YNYLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPLQSYGFQPTNGV</p> <p>GYQPYRVVLSFELLHAPATVCGPKKSTNLVKNKCVNFNFNGLTGTGVLTESN</p> <p>KKFLPFQQFGRDIADTTDAVRDPQTLEILDITPCSFGGVSVITPGTNTSNQVAVL</p> <p>YQGVNCTEVPVAIHADQLTPTWRVYSTGSNVFQTRAGCLIGAELVNNNSYECDI</p> <p>PIGAGICASYQTQTNSPGSASSVASQSIIAYTMSLGAENSVAYSNNNSIAIPTNFTI</p> <p>SVTTEILPVSMTKTSVDCTMYICGDSTECNLLLQYGSFCTQLNRALTGIAVEQD</p> <p>KNTQEVFAQVKQIYKTPPIKDFGGFNFSQILPDPSPKPSKRSFIEDLLFNKVTLADA</p> <p>GFIKQYGDCLGDIAARDLICAQKFNGLTVLPPLLTDemiaQYTSALLAGTITSGW</p> <p>TFGAGAALQIPFAMQMAYRFNGIGVTQNVLYENQKLIANQFNSAIGKIQDSLS</p> <p>STASALGKLQDVVNQNAQALNTLVKQLSSNFGAISSVLNDILSRDPPEAEVQI</p> |

DRLITGRLQSLQTYVTQQLIRAAEIRASANLAATKMSECVLGQSKRVDFCGKGY  
 HLMSFPQSAPHGVVFLHVTVPAQEKNFTTAPAICHGDKAHFPREGVFVSNG  
 THWFVTQRNFYEPQIITTDNTFVSGNCDVVIGIVNNTVYDPLQPELDSFKEELD  
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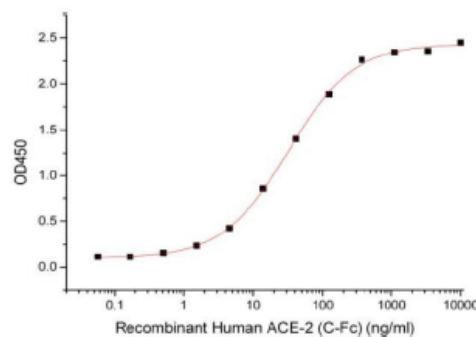
## SEC-HPLC



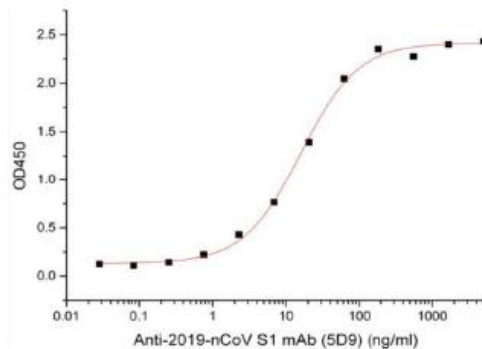
Results show DRA59 is trimer (theoretical MW: 411kDa) with high purity

## Bioactivity

### ELISA



Immobilized S trimer (D614G) His (Cat#DRA59) at 2µg/ml (100µl /well) can bind Human ACE 2 Fc(Cat#C05Y). The ED<sub>50</sub> of Recombinant Human ACE 2 Fc(Cat#C05Y) is 31.75 ng/ml.



Immobilized S trimer (D614G) His (Cat#DRA59) at 2µg/ml (100µl /well) can bind Anti 2019 nCoV S1 mAb (5D9)(Cat#NC025). The ED<sub>50</sub> of Anti 2019 nCoV S1 mAb (5D9)(Cat#NC025) is 15.81ng/ml.