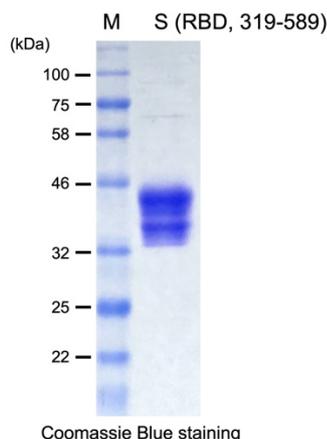


Recombinant SARS-CoV-2 Spike glycoprotein (RBD, 319-589)

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| Category | protein and peptide |
| Catalog No. | P-S-001 |
| Product information | |
| Product | Recombinant SARS-CoV-2 Spike glycoprotein (RBD, 319-589) |
| Source | HEK293 cells |
| Tag | C-terminal G196 (DLVPR) tag-His tag |
| Purification method | A DNA sequence encoding the SARS-CoV-2 spike glycoprotein (RBD, 319-589) with its own signal sequence was expressed with G196 (DLVPR) and His tags in C terminus. The secreted glycoprotein was purified using a Ni-NTA affinity column. |
| UniProt ID | PODTC2 |
| Synonyms | S glycoprotein |
| Gene ID | 43740568 |
| Sequences | |
| <p>RVQPTESIVRFPNITNLCPFGGEVFNATRFASVYAWNRKRISNCVADYSVLYNSASFST FKCYGVSPTKLNDLCFTNVYADSFVIRGDEVROIAPGQTGKIADYNYKLPDDFTGCVI AWNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPL QSYGFQPTNGVGYQPYRVVLSFELLHAPATVCGPKKSTNLVKNKCVNF</p> | |
| Additional sequences | C-terminal GSDLVPRGSHHHHHH |
| Predicted molecular weight | 27 kDa including tags |
| Additional information | Molecular size of the spike glycoprotein (RBD, 319-589) is higher than the predicted molecular weight of 27 kDa due to glycosylation. |
| Lot No. | 002 |
| Concentration | 0.53 mg/mL, by Bradford protein assay |
| Buffer | 0.2 μm filtered solution in PBS, pH7.4 |
| Purity | >95%, by SDS-PAGE |
| Storage | Store at -80°C. |

Purification method



Purification method.

The SARS-CoV-2 spike protein (RBD, 319-589) with its own signal sequence was expressed in HEK293 cells with G196 (DLVPR) and His tags in C terminus and purified using Ni-NTA agarose.

Background

SARS-CoV-2 enters the host cell mediated by the large type I transmembrane spike glycoprotein binding to the host cell surface receptor angiotensin-converting enzyme 2 (ACE2) protein. The spike glycoprotein is comprised of homotrimers with two functional subunits, S1 and S2. S1 contains a receptor binding domain (RBD), which is responsible for recognizing the ACE2 protein. S2 contains basic elements needed for the membrane fusion.

