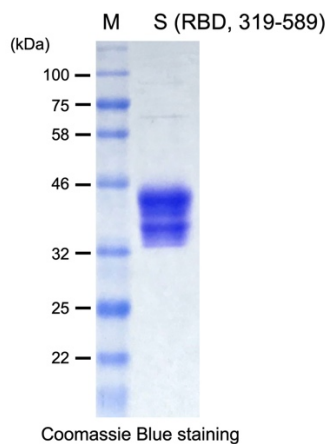


Recombinant SARS-CoV-2 Spike glycoprotein (RBD, 319-589)

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	
	RVQPTESIVRFPNITNLCPFGEVFNATRFASVYAWNRKRISNCVADYSVLYNSASFST FKCYGVSPTKLNDLCFTNVYADSFVIRGDEVROIAPGQTGKIADYNYKLPDDFTGCVI AWNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTPCNGVEGFNCYFPL QSYGFQPTNGVGYQPYRVVLSFELLHAPATVCGPKKSTNLVKNKCVNF
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.

