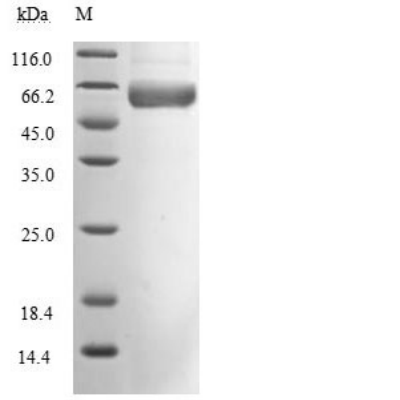
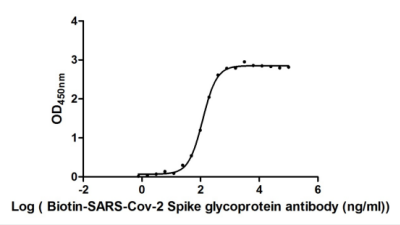
Recombinant Severe acute respiratory syndrome coronavirus 2 Spike glycoprotein (S), partial (Active)

Product Code	CSB-MP3324GMY1
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P0DTC2
Form	Lyophilized powder
Product Type	Others
Immunogen Species	Severe acute respiratory syndrome coronavirus 2 (2019-nCoV) (SARS-CoV-2)
Biological Activity	①Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV-2-S1-RBD at 2 μg/ml can bind Biotinylated Anti-SARS-CoV-2-S Antibody (CSB-RA33245D1GMY), the EC_{50} of SARS-CoV-2-S1-RBD protein is 106.2-131.2 ng/ml. ②Measured by its binding ability in a functional ELISA. Immobilized human ACE2 (CSB-MP866317HU) at 2 μg/ml can bind SARS-CoV-2-S1-RBD, the EC_{50} of SARS-CoV-2-S1-RBD protein is 8.363-12.82 ng/ml.
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	RVQPTESIVRFPNITNLCPFGEVFNATRFASVYAWNRKRISNCVADYSVLYNSASFSTFKCYGVSPTKLNDLCFTNVYADSFVIRGDEVRQIAPGQTGKIADYNYKLPDDFTGCVIAWNSNNLDSKVGGNYNYLYRLFRKSNLKPFERDISTEIYQAGSTPCNGVEGFNCYFPLQSYGFQPTNGVGYQPYRVVVLSFELLHAPATVCGPKKSTNLVKNKCVNF
Lead Time	3-7 business days
Research Area	Microbiology
Source	Mammalian cell
Gene Names	S
Expression Region	319-541aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	C-terminal 6xHis-mFc-tagged
Mol. Weight	51.1 kDa
Protein Description	Partial
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.
Predicted band size: 51.1 kDa
Observed band size: 66 kDa due to glycosylation



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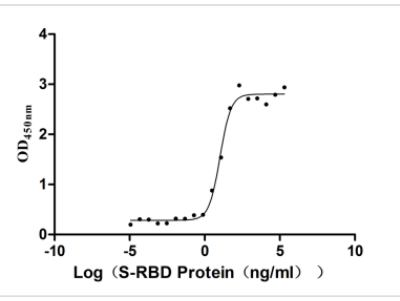

Measured by its binding ability in a functional ELISA. Immobilized human ACE2 (CSB-MP866317HU) at 2 μg/ml can bind SARS-CoV-2-S1-RBD, the EC_{50} of SARS-CoV-2-S1-RBD protein is 8.363-12.82 ng/ml.

Description

CUSABIO expressed the human SARS-CoV-2 spike glycoprotein (S) amino acid residues Arg319-Phe541 carrying a C-terminal 6xHis-mFc-tag in the mammalian cells. The obtained product is the recombinant partial-length human SARS-CoV-2 S protein. The purity of this protein was measured by SDS-PAGE and reached up to 90%. It migrated to a band with a molecular weight of 66 kDa on the gel under reducing conditions. And it contains less than 1.0 EU/ug endotoxin determined by the LAL method. Its bio-activity was tested through the functional ELISA. In-stock recombinant SARS-CoV-2 S protein is offered now. This S protein has been cited in one reference by Li Zhu et al.

SARS-CoV-2 has been threatening and hitting humans across the world since its emerging in late 2019. The S protein of the SARS-CoV-2 is responsible for receptor recognition, viral attachment, and entry into host cells.

Endotoxin

Less than 1.0 EU/ug as determined by LAL method.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.