



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

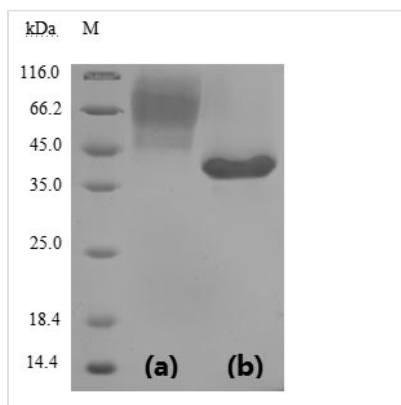
Product Code	CSB-YP3324GMY1
Abbreviation	Recombinant SARS-CoV-2 S protein, partial (Active)
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P0DTC2
Form	Lyophilized powder
Storage Buffer	Lyophilized from a 0.2 µm sterile filtered 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0
Product Type	Recombinant Protein
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 SARS-CoV-2-S Antibody (CSB-RA33245A1GMY), the EC₅₀ of SARS-CoV-2-S1-RBD protein is 19.60-39.42 ng/ml. 🐼 Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV-2-S1-RBD at 5 µg/ml can bind human ACE2 (CSB-MP866317HU), the EC₅₀ of SARS-CoV-2-S1-RBD protein is 31.80 - 44.69 ng/ml. ③Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV-2-S1-RBD at 2 µg/ml can bind SARS-CoV-2-S Antibody (CSB-RA33245A0GMY), the EC₅₀ of SARS-CoV-2-S1-RBD protein is 13.48-19.50 ng/ml. ④SARS-CoV-2 Spike protein RBD his/sumostar tag (CSB-YP3324GMY1) captured on COOH chip can bind Human ACE2 protein Fc tag (CSB-MP866317HU) with an affinity constant of 100 nM as detected by LSPR Assay. ⑤SARS-CoV-2 Spike protein RBD His/Sumostar Tag (CSB-YP3324GMY1) captured on COOH chip can bind SARS-CoV-2 Spike RBD Nanobody (CSB-RA33245A2GMY) with an affinity constant of 28.2nM as detected by LSPR Assay.
Purity	≥ 90% as determined by SDS-PAGE.
Sequence	RVQPTESIVRFPNITNLCPFGEVFNATRFASVYAWNRRKRISNCVADYSVLYNSA SFSTFKCYGVSPTKLNDLCFTNVYADSFVIRGDEVQRQIAPGQTGKIADYNYKLP DDFTGCVIAWNSNNLDSKVGGNYNLYRLFRKSNLKPFERDISTEIQAGSTP



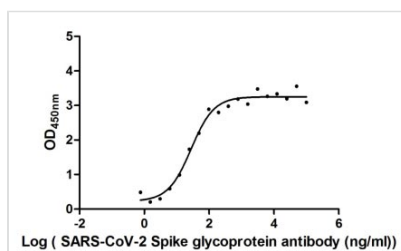
CNGVEGFNCYFPLQSYGFQPTNGVGYQPYRVVLSFELLHAPATVCGPKKST
NLVKNKCVNF

Research Area	Microbiology
Source	Yeast
Target 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	N-terminal 6xHis-sumostar-tagged
Mol. Weight	38.2 kDa
Protein Length	Partial

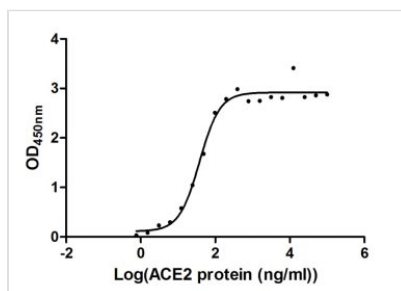
Image



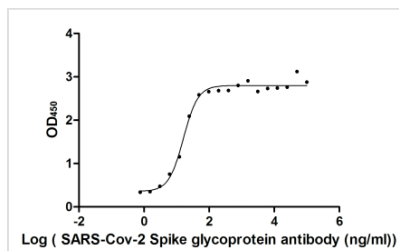
(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Activity
Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV-2-S1-RBD at 2 µg/ml can bind SARS-CoV-2-S Antibody (CSB-RA33245A1GMV), the EC₅₀ of SARS-CoV-2-S1-RBD protein is 19.60-39.42 ng/ml.

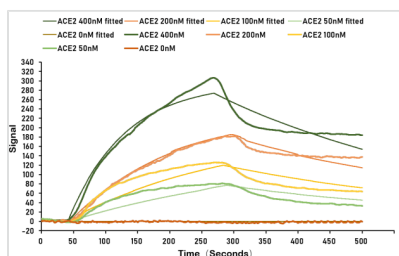


Activity
Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV-2-S1-RBD at 5 µg/ml can bind human ACE2 (CSB-MP866317HU), the EC₅₀ of SARS-CoV-2-S1-RBD protein is 31.80 - 44.69 ng/ml.



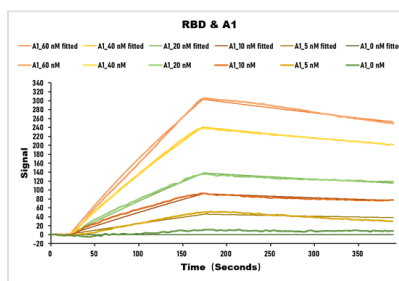
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Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV-2-S1-RBD at 2 µg/ml can bind SARS-CoV-2-S Antibody (CSB-RA33245A0GMY), the EC₅₀ of SARS-CoV-2-S1-RBD protein is 13.48-19.50 ng/ml.



Activity

SARS-CoV-2 Spike protein RBD his/sumostar tag (CSB-YP3324GMY1) captured on COOH chip can bind Human ACE2 protein Fc tag (CSB-MP866317HU) with an affinity constant of 100 nM as detected by LSPR Assay.



Activity

SARS-CoV-2 Spike protein RBD His/Sumostar Tag (CSB-YP3324GMY1) captured on COOH chip can bind SARS-CoV-2 Spike RBD Nanobody (CSB-RA33245A2GMY) with an affinity constant of 28.2nM as detected by LSPR Assay.

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.

Shelf Life

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