# **Product Datasheet**

# Recombinant SARS-CoV-2 Spike S1 (RBD) His (C-Term) Protein NBP2-90982

Unit Size: 100 ug

Store at -20 to -70C. Avoid freeze-thaw cycles.

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**Publications: 1** 

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### NBP2-90982

**Recommended Dilutions** 

Recombinant SARS-CoV-2 Spike S1 (RBD) His (C-Term) Protein

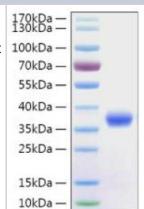
Recombinant SARS-CoV-2 Spike S1 (RBD) His (C-Term) Protein	
Product Information	
Unit Size	100 ug
Concentration	Lyoph
Storage	Store at -20 to -70C. Avoid freeze-thaw cycles.
Preservative	No Preservative
Reconstitution Instructions	Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water.
Purity	>95%, by SDS-PAGE
Buffer	Lyophilized from a 0.22 um filtered solution of PBS, pH 7.4
Product Description	
Description	A bioactive partial recombinant protein with a C-Terminal His-tag and corresponding to the amino acids sequence of (319-541) of the SARS-CoV-2 Spike S1  Source: HEK293  RVQPTESIVRFPNITNLCPFGEVFNATRFASVYAWNRKRISNCVADYSVLYNSA SFSTFKCYGVSPTKLNDLCFTNVYADSFVIRGDEVRQIAPGQTGKIADYNYKLP DDFTGCVIAWNSNNLDSKVGGNYNYLYRLFRKSNLKPFERDISTEIYQAGSTPC NGVEGFNCYFPLQSYGFQPTNGVGYQPYRVVVLSFELLHAPATVCGPKKSTN LVKNKCVNF (Accession #YP_009724390.1)
Gene ID	43740568
Gene Symbol	S
Details of Functionality	1. Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV-2 Spike S1 RBD at 2 ug/mL (100 uL/well) can bind Human ACE-2 with a linear range of 0.001-2.96 ng/mL. 2. Immobilized human ACE2 on COOH Chip, can bind SARS-COV-2 Spike S1 RBD Protein with an affinity constant of 35.3 nM as determined in a SPR assay. 3. Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV-2 Spike S1 RBD at 2 ug/mL (100 uL/well) can bind Human ACE-2 with a linear range of 0.001-1.69 ng/mL.
Endotoxin Note	< 0.1 EU/ug of the protein by LAL method.
Product Application Details	
Applications	ELISA, SDS-Page, HPLC, Surface Plasmon Resonance



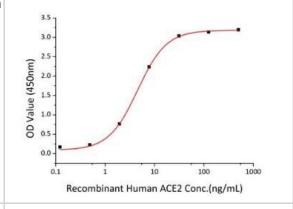
ELISA, SDS-Page, Surface Plasmon Resonance, HPLC

#### **Images**

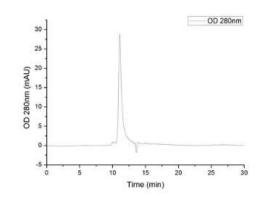
SDS-Page: Recombinant SARS-CoV-2 Spike S1 (RBD) His (C-Term) Protein [NBP2-90982] - Recombinant 2019-nCoV Spike RBD Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 36 kDa.



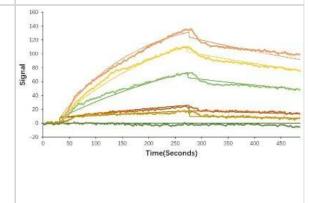
ELISA: Recombinant SARS-CoV-2 Spike S1 (RBD) His (C-Term) Protein [NBP2-90982] - Immobilized Recombinant SARS-COV-2 Spike RBD-His at 2ug/mL (100 uL/well) can bind Recombinant Human ACE2 with a linear range of 0.15-4.53 ng/mL.



HPLC: Recombinant SARS-CoV-2 Spike S1 (RBD) His (C-Term) Protein [NBP2-90982] - The purity of SARS-COV-2 Spike RBD Protein with His tag (Cat.NBP2-90982) was greater than 95% as determined by SEC-HPLC.



Surface Plasmon Resonance: Recombinant SARS-CoV-2 Spike S1 (RBD) His (C-Term) Protein [NBP2-90982] - Immobilized human ACE2 on COOH Chip, can bind SARS-COV-2 Spike RBD Protein with an affinity constant of 36.7 nM as determined in a SPR assay.



#### **Publications**

Caohuy H, Eidelman O, Chen T Et al. Common cardiac medications potently inhibit ACE2 binding to the SARS-CoV-2 Spike, and block virus penetration and infectivity in human lung cells Scientific reports 2021-11-12 [PMID: 34773067]





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#### **Products Related to NBP2-90982**

NBP2-90985 Recombinant SARS-CoV-2 Spike S1 His (C-Term) Protein

NBP3-07065 SARS-CoV-2 Spike S1 Antibody (SP185) - Azide and BSA Free

#### Limitations

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