

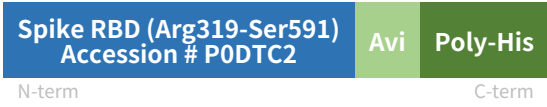
Rev04  
 Update: Mar,01,2022

**DATASHEET**

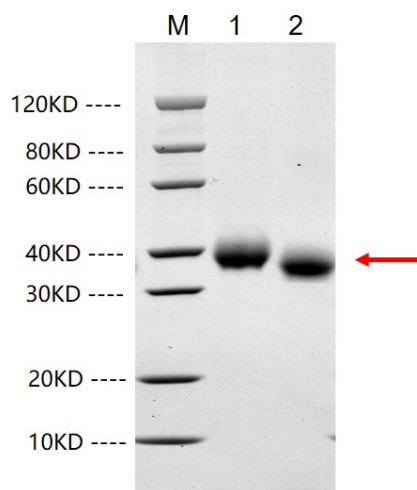
# SARS-CoV-2 Spike protein (RBD, His & Avi tag)

Cat. No.: Z03483

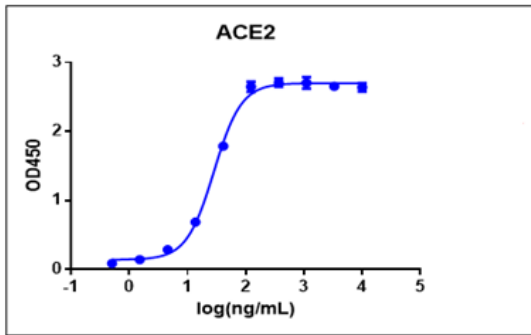
## Product Introduction

<b>Species</b>	SARS-CoV-2
<b>Protein Construction</b>	
<b>Purity</b>	> 95% as analyzed by SDS-PAGE
<b>Endotoxin Level</b>	< 0.2 EU/μg of protein by gel clotting method
<b>Biological Activity</b>	SARS-CoV-2 Spike protein (RBD, Avi & His Tag) can bind with Human ACE2 in functional ELISA assay.
<b>Expression System</b>	293 Cells
<b>Theoretical Molecular Weight</b>	30 kDa
<b>Formulation</b>	Supplied as a solution in PBS pH 7.2.
<b>Concentration</b>	Please refer to the COA for the specific lot.
<b>Storage &amp; Stability</b>	Upon receiving, this product remains stable for up to 6 months at -20°C or below. Avoid repeated freeze-thaw cycles.

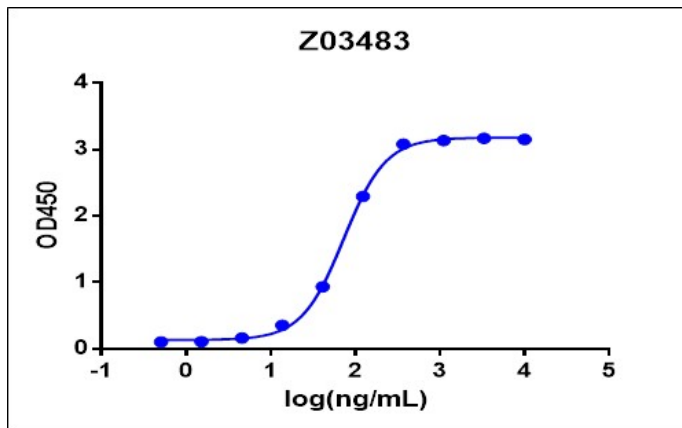
## Examples



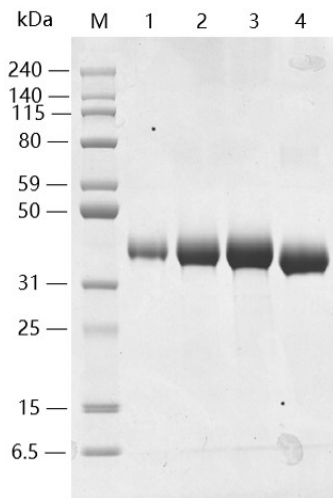
1: 2 μg of RBD, reducing (R)  
 2: 2 μg of RBD, non-reducing (N)  
 > 90% as analyzed by SDS-PAGE



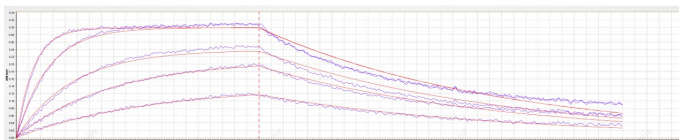
Immobilized ACE-2 Fc Chimera, Human (Cat. No. Z03484) at 2  $\mu\text{g}/\text{mL}$  can bind SARS-CoV-2 Spike protein (RBD, His & Avi tag) (Cat. No. Z03483) with a serial dilution. THE™ His Tag Antibody [HRP], mAb, Mouse (Cat. No. A00612) is used as a secondary antibody (0.2  $\mu\text{g}/\text{mL}$ ).



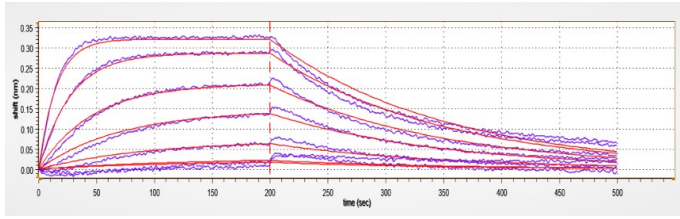
Immobilized ACE-2 Fc Chimera, Human (Cat. No. Z03484) at 2  $\mu\text{g}/\text{mL}$  can bind SARS-CoV-2 Spike protein (RBD, His & Avi Tag) (Cat. No. Z03483) with a serial dilution. THE™ His Tag Antibody [HRP], mAb, Mouse (Cat.No.A00612) is used as a secondary antibody (0.1  $\mu\text{g}/\text{mL}$ ).



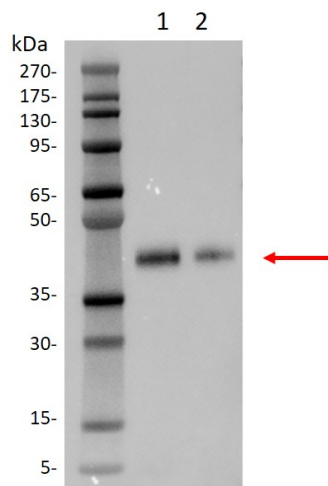
Lane 1: 1  $\mu\text{g}$  of SARS-CoV-2 Spike protein (RBD, His & Avi tag), reducing(R)  
 Lane 2: 3  $\mu\text{g}$  of SARS-CoV-2 Spike protein (RBD, His & Avi tag), reducing(R)  
 Lane 3: 5  $\mu\text{g}$  of SARS-CoV-2 Spike protein (RBD, His & Avi tag), reducing(R)  
 Lane 4: 5  $\mu\text{g}$  of SARS-CoV-2 Spike protein (RBD, His & Avi tag), non-reducing(NR)  
 > 95% as analyzed by SDS-PAGE



Loaded ACE-2 Fc Chimera, Human (CHO-expressed) Protein (Cat. No. Z03516) on Protein A Biosensor, can bind SARS-CoV-2 Spike protein (RBD, His & Avi Tag) (Cat. No. Z03483) with an affinity constant of 12.5 nM as determined in BLI assay.



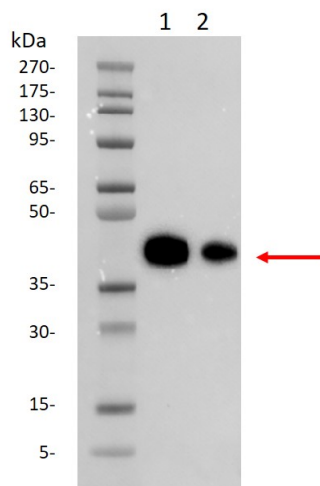
Loaded ACE-2 Fc Chimera, Human (CHO-expressed) Protein (Cat. No. Z03516) on Protein A Biosensor, can bind SARS-CoV-2 Spike protein (RBD, His & Avi tag) (Cat. No. Z03483) with an affinity constant of 18.6 nM as determined in BLI assay.



Western blot analysis of SARS-CoV-2 Spike protein (RBD, His & Avi tag) (GenScript, Z03483) using His Antibody (GenScript, A00186).

Lane 1: 10 ng of Z03483

Lane 2: 5 ng of Z03483



Western blot analysis of SARS-CoV-2 Spike protein (RBD, His & Avi tag) (GenScript, Z03483) using S1 Antibody (GenScript, A02053).

Lane 1: 10 ng of Z03483

Lane 2: 5 ng of Z03483

## Background

**Target Background :** SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2) also known as 2019-nCoV (2019 Novel Coronavirus) is a virus that causes illnesses ranging from the common cold to severe diseases. SARS-CoV-2 Spike Protein is composed of S1 domain and S2 domain. S1 contains a receptor-binding domain (RBD) that can specifically bind to angiotensin-converting enzyme 2 (ACE2), the receptor on target cells. It is believed that SARS-CoV-2 Spike Protein (RBD) has potential value for the diagnosis of the virus.

**Synonyms :** SARS-CoV-2 SP RBD; 2019-nCoV SP RBD

**For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.**