

Rev04
 Update: Mar,01,2022

DATASHEET

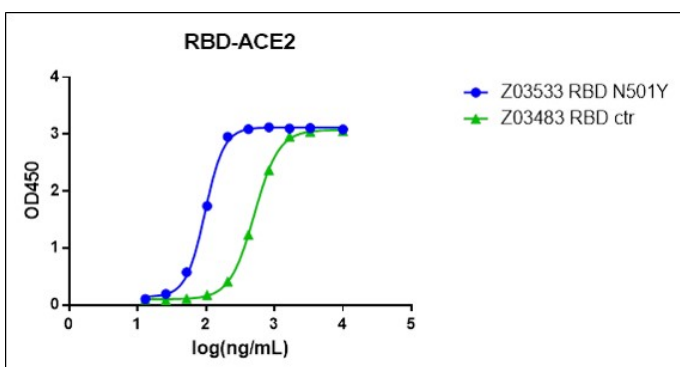
SARS-CoV-2 Spike protein (RBD, N501Y, His & Avi Tag)

Cat. No.: Z03533

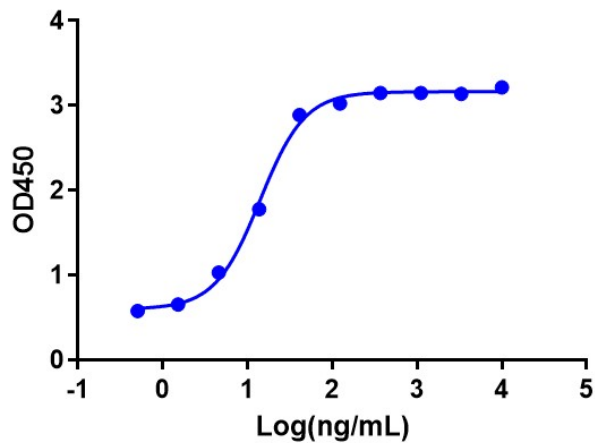
Product Introduction

Species	SARS-CoV-2
Protein Construction	<div style="display: flex; align-items: center; gap: 10px;"> <div style="background-color: #0056b3; color: white; padding: 5px; text-align: center;"> Spike RBD [Arg319-Ser591 (N501Y)] Accession # P0DTC2 </div> <div style="background-color: #90c080; color: white; padding: 5px; text-align: center;"> Avi </div> <div style="background-color: #4f7942; color: white; padding: 5px; text-align: center;"> Poly-His </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> N-term C-term </div>
Purity	> 90% as analyzed by SDS-PAGE
Endotoxin Level	< 0.2 EU/μg of protein by gel clotting method
Biological Activity	SARS-CoV-2 Spike protein (RBD, N501Y, Avi & His Tag) can bind with human ACE2 (Cat. No.: Z03484) in functional ELISA assay.
Expression System	293 Cells
Theoretical Molecular Weight	30 kDa
Formulation	Supplied as a solution in PBS, pH 7.4.
Concentration	Please refer to the COA for the specific lot.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at -20°C or below. Avoid repeated freeze-thaw cycles.

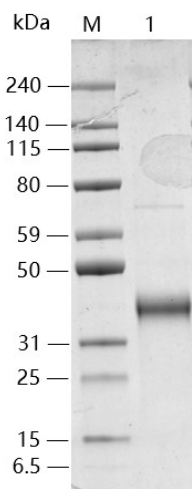
Examples



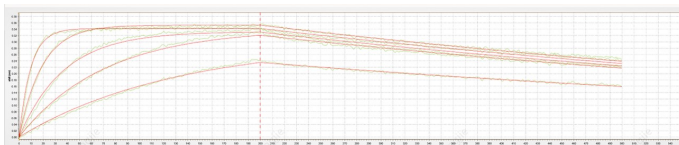
Immobilized ACE-2 Fc Chimera, Human (Cat. No. Z03484) at 2μg/mL can bind SARS-CoV-2 Spike protein (RBD, N501Y, His & Avi Tag) (Cat. No. Z03533) with serial dilutions. THE™ His Tag Antibody [HRP], mAb, Mouse (Cat. No. A00612) is used as a secondary antibody (0.2 μg/mL).



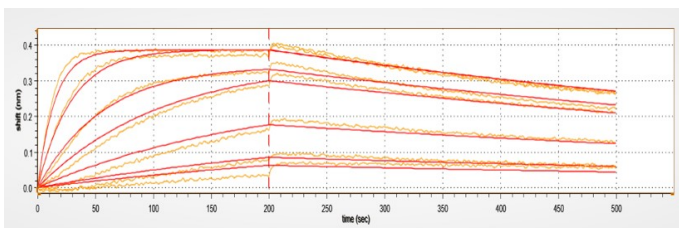
Immobilized ACE-2 Fc Chimera, Human (Cat. No. Z03484) at 2 $\mu\text{g}/\text{mL}$ can bind SARS-CoV-2 Spike protein (RBD, N501Y, His & Avi Tag) (Cat. No. Z03533) with a serial dilution. THE™ His Tag Antibody [HRP], mAb, Mouse (Cat.No.A00612) is used as a secondary antibody (0.2 $\mu\text{g}/\text{mL}$).



Lane 1: 1 μg of SARS-CoV-2 Spike protein (RBD, N501Y, His & Avi Tag), reducing(R)
 > 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, N501Y, His & Avi Tag) (Cat. No. Z03533) with an affinity constant of 2.11 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, N501Y, His & Avi Tag) (Cat. No. Z03533) with an affinity constant of 3.04 nM as determined in BLI assay.

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. The spike protein mutation N501Y is one of six key contact residues within the receptor-binding domain (RBD) and has been identified as increasing binding affinity to human and murine ACE2.

Synonyms : SARS-CoV-2 SP RBD, N501Y; 2019-nCoV SP RBD, N501Y

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