

## SARS-CoV-2 (COVID-19) Spike RBD protein, His tag (active)

## Cat No. GTX01546-pro

<b>Application</b>	ELISA, Functional Assay
<b>Species</b>	SARS Coronavirus 2

Reference ( 1 )

Package

100 µg

## APPLICATION

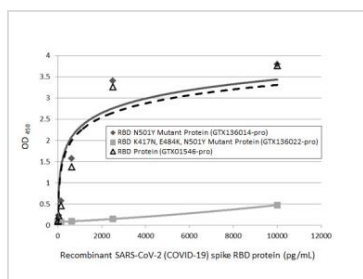
## Application Note

Activity was measured by its binding ability in a functional ELISA. Immobilized Recombinant SARS-CoV-2 (COVID-19) Spike RBD protein at 2 µg/mL (100 µL/well) can bind Recombinant Human ACE2 with a linear range of 8-80 ng/mL.

## PROPERTIES

<b>Form</b>	Lyophilized powder
<b>Buffer</b>	Reconstitute with distilled water to a concentration of 0.1-0.5mg/ml. Lyophilized from 0.22µm-filtered PBS (pH7.4).
<b>Preservative</b>	No preservative
<b>Storage</b>	Store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.
<b>Region/Sequence</b>	Arg319-Phe541 of SARS-CoV-2 (COVID-19) Spike RBD protein (Accession #YP_009724390.1) fused with a 6×His tag at the C-terminus.
<b>Expression System</b>	HEK293 cells
<b>Purity</b>	> 95% by SDS-PAGE
<b>Endotoxin</b>	< 0.1 EU/µg (determined by LAL method)
<b>Conjugation</b>	Unconjugated
<b>Note</b>	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

## DATA IMAGES

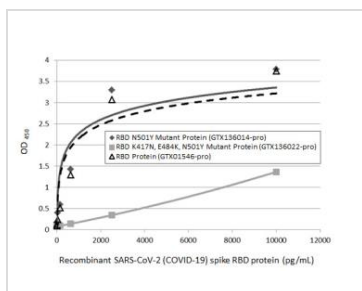


## GTX01546-pro ELISA Image

Sandwich ELISA detection of recombinant SARS-CoV-2 (COVID-19) Spike RBD (N501Y Mutant) protein, His tag (active) (GTX136014-pro), SARS-CoV-2 (COVID-19) Spike RBD (K417N, E484K, N501Y Mutant) protein, His tag (active) (GTX136022-pro), and SARS-CoV-2 (COVID-19) Spike RBD protein, His tag (active) (GTX01546-pro) using SARS-CoV-2 (COVID-19) Spike RBD antibody [HL1014] (GTX635807) as capture antibody at concentration of 5 µg/mL and SARS-CoV-2 (COVID-19) Spike RBD antibody [HL1003] (HRP) (GTX635792-01) as detection antibody at concentration of 1 µg/mL.

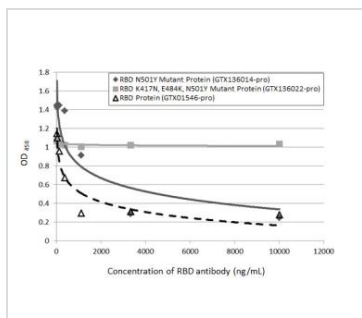


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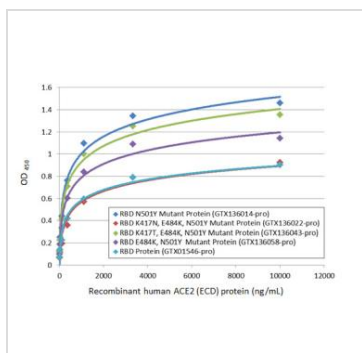
**GTX01546-pro ELISA Image**

Sandwich ELISA detection of recombinant SARS-CoV-2 (COVID-19) Spike RBD (N501Y Mutant) protein, His tag (active) (GTX136014-pro), SARS-CoV-2 (COVID-19) Spike RBD (K417N, E484K, N501Y Mutant) protein, His tag (active) (GTX136022-pro), and SARS-CoV-2 (COVID-19) Spike RBD protein, His tag (active) (GTX01546-pro) using SARS-CoV-2 (COVID-19) Spike RBD antibody [HL1014] (GTX635807) as capture antibody at concentration of 5 µg/mL and SARS-CoV-2 (COVID-19) Spike RBD antibody [HL1004] (HRP) (GTX635793-01) as detection antibody at concentration of 1 µg/mL.



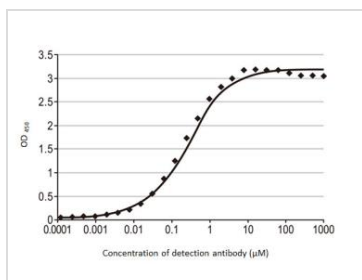
**GTX01546-pro Functional Assay Image**

Inhibition analysis of immobilized recombinant SARS-CoV-2 (COVID-19) Spike RBD (N501Y Mutant) protein, His tag (active) (GTX136014-pro), SARS-CoV-2 (COVID-19) Spike RBD (K417N, E484K, N501Y Mutant) protein, His tag (active) (GTX136022-pro), and SARS-CoV-2 (COVID-19) Spike RBD protein, His tag (active) (GTX01546-pro) (coated at 2 µg/mL) binding to soluble recombinant Human ACE2 (ECD) protein, mouse IgG Fc tag (GTX135683-pro) (1000 ng/mL). ACE2 binding was inhibited by increasing concentrations of SARS-CoV-2 (COVID-19) Spike RBD antibody [HL1003] (GTX635792) (14-10000 ng/mL). Bound ACE2 protein was detected by Goat Anti-Mouse IgG antibody (HRP) (GTX213111-01) (1:10000).



**GTX01546-pro Functional Assay Image**

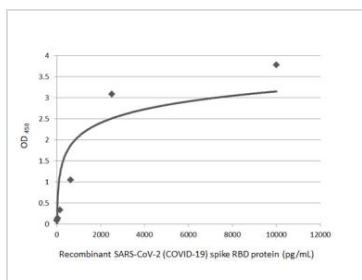
Functional ELISA analysis of immobilized recombinant SARS-CoV-2 (COVID-19) Spike RBD (N501Y Mutant) protein, His tag (active) (GTX136014-pro), SARS-CoV-2 (COVID-19) Spike RBD (K417N, E484K, N501Y Mutant) protein, His tag (active) (GTX136022-pro), SARS-CoV-2 (COVID-19) Spike RBD (K417T, E484K, N501Y Mutant) protein, His tag (active) (GTX136043-pro), SARS-CoV-2 (COVID-19) Spike RBD (E484K, N501Y Mutant) protein, His tag (active) (GTX136058-pro) and SARS-CoV-2 (COVID-19) Spike RBD protein, His tag (active) (GTX01546-pro) (coated at 2 µg/mL) binding to soluble recombinant Human ACE2 (ECD) protein, mouse IgG Fc tag (active) (GTX135683-pro) (13-10000 ng/mL). Bound protein was detected by Goat Anti-Mouse IgG antibody (HRP) (GTX213111-01) (1:10000).



**GTX01546-pro ELISA Image**

Indirect ELISA analysis performed by coating plate with recombinant SARS-CoV-2 (COVID-19) Spike RBD protein, His tag (active) (GTX01546-pro) (50 ng). Coated protein was probed with SARS-CoV-2 (COVID-19) Spike RBD antibody [HL1004] (GTX635793) (1000-1.19\*10<sup>-4</sup> µM). Rabbit IgG antibody (HRP) (GTX213110-01) (1:10000) was used to detect bound primary antibody.

EC50 : 0.2 µM



**GTX01546-pro ELISA Image**

Sandwich ELISA detection of recombinant SARS-CoV-2 (COVID-19) Spike RBD protein, His tag (active) (GTX01546-pro) using SARS-CoV-2 (COVID-19) Spike RBD antibody [HL1003] (GTX635792) as capture antibody at concentration of 5 µg/mL and HRP-conjugated SARS-CoV-2 (COVID-19) Spike RBD antibody [HL1002] (GTX635791) as detection antibody at concentration of 1 µg/mL.

Please notice that GTX635791 needs to be conjugated to HRP to function as the detection antibody when paired with GTX635792. Please contact us for custom HRP-conjugated antibody.



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