

## SARS-CoV / SARS-CoV-2 (COVID-19) spike antibody [CR3022]

## Cat No. GTX01555

<b>Host</b>	Human
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	IgG1
<b>Application</b>	ELISA, Neutralizing/Inhibition
<b>Reactivity</b>	SARS Coronavirus, SARS Coronavirus 2

Reference ( 3 )

Package

100 µg

## PRODUCT

## Summary

SARS-CoV / SARS-CoV-2 (COVID-19) spike antibody [CR3022] binds to both SARS-CoV and SARS-CoV-2 with high affinity (PMID: 16796401 & 32065055). The initial characterization of the binding of this antibody was performed by ELISA and indicates potential for the development of diagnostic assays, as both virus-capture assays, or as controls in serological assays measuring immune responses to virus exposure. The original human IgG1 version of the antibody works synergistically in combination with another non-competing SARS antibody CR3014 and is a potential candidate for passive immune prophylaxis of SARS-CoV infection (ter Meulen et al., 2006). The original antibody (human IgG1) was also reported to bind the SARS-CoV-2 RBD (KD of 6.3 nM). This antibody may have potential as a therapeutic agent, alone or in combination with other neutralizing antibodies for treatment of SARS-CoV-2 infections (Tian et al., 2020).

## APPLICATION

## Application Note

\*Optimal dilutions/concentrations should be determined by the researcher.

Suggested dilution	Dilution
ELISA	Assay dependent
Neutralizing/Inhibition	Assay dependent

Not tested in other applications.

## Product Note

This antibody binds the amino acids 318-510 in the S1 domain of the SARS-CoV Spike protein as well as SARS-CoV-2 (COVID-19) Spike protein. The antibody also binds to P462L-substituted S318-510 fragments of the SARS spike protein. The binding epitope is only accessible in the "open" conformation of the spike protein (Joyce et al. 2020)

## PROPERTIES

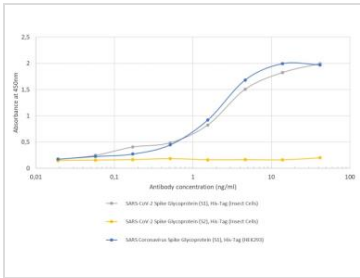
<b>Form</b>	Liquid
<b>Buffer</b>	PBS
<b>Preservative</b>	0.02% ProClin 300
<b>Storage</b>	Store as concentrated solution. Centrifuge briefly prior to opening vial. For short-term storage (1-2 weeks), store at 4°C. For long-term storage, aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.
<b>Concentration</b>	1 mg/ml (Please refer to the vial label for the specific concentration.)



For full product information, images and publications, please visit our [website](#).

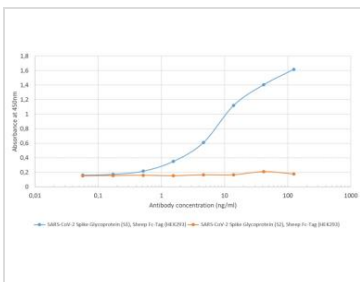
<b>Immunogen</b>	The original monoclonal antibody was generated by sequencing peripheral blood lymphocytes of a patient exposed to the SARS-CoV.
<b>Purification</b>	Protein A purified
<b>Conjugation</b>	Unconjugated
<b>Note</b>	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

**DATA IMAGES**



**GTX01555 ELISA Image**

ELISA analysis of SARS-CoV-2 Spike S1 protein, His tag (Insect Cells; grey line), SARS-CoV-2 Spike S2 protein, His tag (Insect Cells; yellow line) and SARS Coronavirus Spike S1 protein, His tag (HEK293 cells; blue line) at concentrations of 5 µg/ml using GTX01555 SARS-CoV / SARS-CoV-2 (COVID-19) spike antibody [CR3022]. A 3-fold serial dilution antibody from 41.6 ng/ml was performed. For detection, a 1:4000 dilution of HRP-labelled anti-human IgG antibody was used.



**GTX01555 ELISA Image**

ELISA analysis of SARS-CoV-2 Spike S1 protein, Sheep Fc tag (blue line) and SARS-CoV-2 Spike S2 protein, Sheep Fc tag (orange line) at concentrations of 5 µg/ml using GTX01555 SARS-CoV / SARS-CoV-2 (COVID-19) spike antibody [CR3022]. A 3-fold serial dilution primary antibody from 125 ng/ml was performed. For detection, a 1:4000 dilution of HRP-labelled anti-human IgG antibody was used.



For full product information, images and publications, please visit our [website](https://www.genetex.com).