

## Product Datasheet

# Anti-COVID-19 & SARS-CoV S glycoprotein [CR3022] (orb758974)

<b>Catalog Number</b>	orb758974
<b>Category</b>	Antibodies
<b>Description</b>	Human monoclonal antibody to COVID-19 & SARS-CoV S glycoprotein
<b>Target</b>	COVID-19 & SARS-CoV S glycoprotein
<b>Clonality</b>	Monoclonal
<b>Species/Host</b>	Human
<b>Isotype</b>	IgM
<b>Conjugation</b>	Unconjugated
<b>Reactivity</b>	Virus
<b>Concentration</b>	1 mg/ml
<b>Buffer/Preservatives</b>	PBS with 0.02% Proclin 300.
<b>Purity</b>	Purified
<b>Immunogen</b>	The original monoclonal antibody was generated through an scFv library derived from a peripheral blood lymphocytes of a patient exposed to the SARS-CoV.
<b>UniProt ID</b>	<b>P59594</b>
<b>Tested applications</b>	ELISA, IF

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## Specificity

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).

## Clone Number

CR3022

## Storage

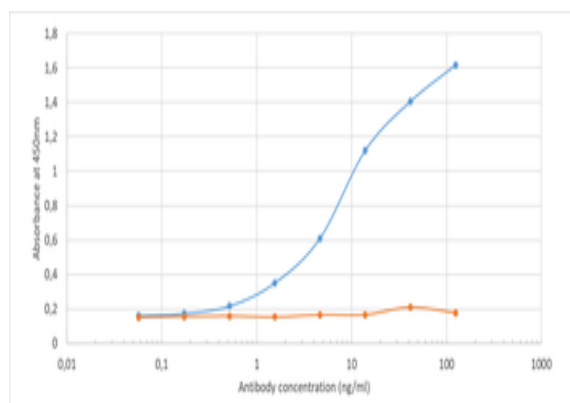
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

## Note

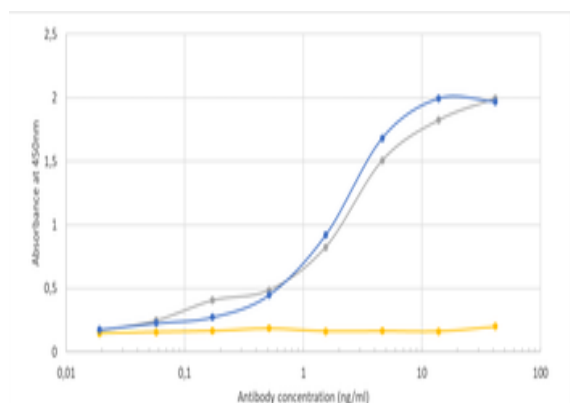
For research use only

## Expiration Date

12 months from date of receipt.



Binding curve of anti-COVID-19 & SARS-CoV S glycoprotein antibody CR3022 (orb669766) to SARS-CoV-2 Spike Glycoprotein (S1), Sheep Fc-Tag and SARS-CoV-2 Spike Glycoprotein (S2), Sheep Fc-Tag from HEK293 cells. ELISA plate coated with SARS-CoV-2 Spike Glycoprotein (S1), Sheep Fc-Tag (blue line) or SARS-CoV-2 Spike Glycoprotein (S2), Sheep Fc-Tag (orange line) from HEK293 cells (The Native Antigen Company) at concentrations of 5 µg/ml. A 3-fold serial dilution from 125 ng/ml was performed using orb669766. For detection, a 1:4000 dilution of HRP-labelled anti-human IgG antibody was used.



Binding curve of anti-COVID-19 & SARS-CoV S glycoprotein antibody CR3022 (orb669766) to SARS-CoV-2 Spike Glycoprotein domains S1 and S2 of various origin. ELISA plate coated with SARS-CoV-2 Spike Glycoprotein (S1), His-Tag (Insect Cells; grey line), SARS-CoV-2 Spike Glycoprotein (S2), His-Tag (Insect Cells; yellow line) and SARS Coronavirus Spike Glycoprotein (S1), His-Tag (HEK293 cells; blue line) (The Native Antigen Company) at concentrations of 5 µg/ml. A 3-fold serial dilution from 41.6 ng/ml was performed using orb669766. For detection, a 1:4000 dilution of HRP-labelled anti-human IgG antibody was used.

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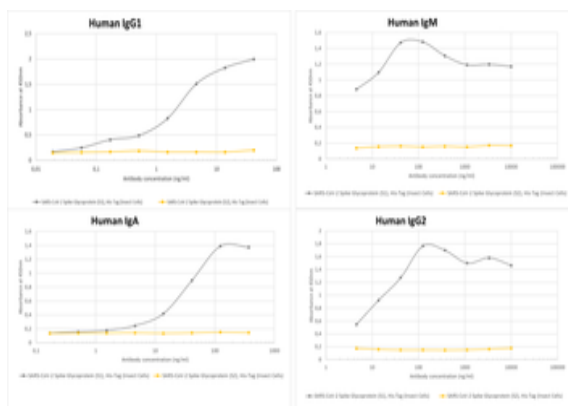
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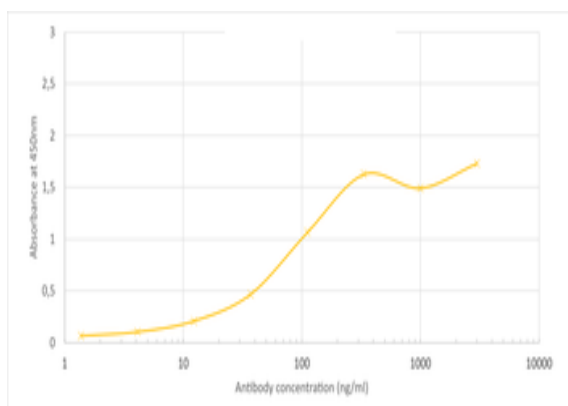
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Binding curve of four different formats of anti-COVID-19 & SARS-CoV S glycoprotein antibody CR3022 to SARS-CoV-2 Spike Glycoprotein domains S1 and S2 (His-Tag (Insect Cells)). ELISA plate coated with SARS-CoV-2 Spike Glycoprotein (S1), His-Tag (Insect Cells; grey line) and SARS-CoV-2 Spike Glycoprotein (S2), His-Tag (Insect Cells; yellow line) (Native Antigen) at concentrations of 5 µg/ml.



ELISA using CR3022 and the Brazilian mutant Spike protein (B1.1.24 / P.1). The plate was coated with the mutant Spike protein P.1 (The Native Antigen Company) at 2.5 µg/ml.

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