

Product datasheet

Anti-SARS-CoV-2 Spike Glycoprotein S1 antibody [CR3022] ab278111

Recombinant

[1 References](#) [2 Images](#)

Overview

Product name	Anti-SARS-CoV-2 Spike Glycoprotein S1 antibody [CR3022]
Description	Human monoclonal [CR3022] to SARS-CoV-2 Spike Glycoprotein S1
Host species	Human
Specificity	<p>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).</p> <p>Reacts with: SARS-CoV, SARS-CoV-2</p>
Tested applications	<p>Suitable for: ELISA</p>
Species reactivity	<p>Reacts with: SARS-CoV, SARS-CoV-2</p>
Immunogen	<p>Tissue, cells or virus corresponding to Human coronavirus SARS-CoV-2 Spike Glycoprotein S1. The original monoclonal antibody was generated by sequencing peripheral blood lymphocytes of a patient exposed to the SARS-CoV.</p> <p>Database link: P59594</p>
General notes	<p>This reformatted human antibody was made using the variable domain sequences of the original Human IgG1 format, for improved compatibility with existing reagents, assays and techniques.</p> <p>This antibody does not have a J-chain and therefore presents as a hexamer, rather than a pentamer.</p> <p>ab278111 was developed to have a human IgM isotype.</p> <p>Other isotypes of clone CR3022 available:</p> <p>ab278112 – human IgA</p> <p>ab273073 – human IgG1</p> <p>ab273074 – rabbit IgG</p> <p>ab273886 – rat IgG2a</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply

- Animal-free production
For more information [see here](#).

Properties

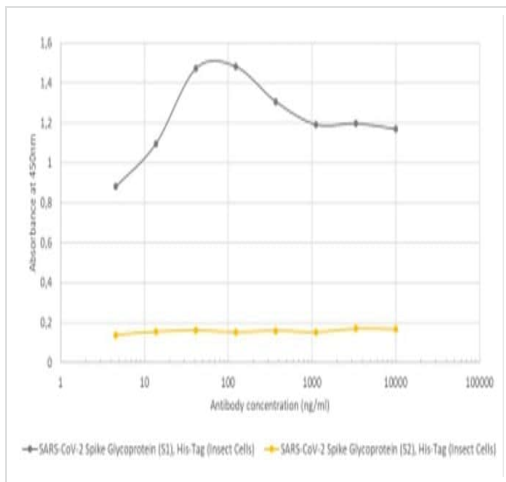
Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.02% Proclin 300 Constituent: 99.98% PBS
Carrier free	Yes
Purity	Affinity purified
Purification notes	Affinity Purified using a recombinant lectin column.
Clonality	Monoclonal
Clone number	CR3022
Isotype	IgM
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab278111 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ELISA		Use a concentration of 0.005 - 10 µg/ml.





Images



ELISA analysis of ab278111 binding 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. A 3-fold serial dilution from 10000 ng/mL was performed using ab278111 conjugated to HRP.

ELISA - Anti-SARS spike glycoprotein + COVID-19 Spike Protein antibody [CR3022] (ab278111)

Why choose a recombinant antibody?

 Research with confidence Consistent and reproducible results	 Long-term and scalable supply Recombinant technology
 Success from the first experiment Confirmed specificity	 Ethical standards compliant Animal-free production

Anti-SARS spike glycoprotein + COVID-19 Spike Protein antibody [CR3022] (ab278111)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors