

Antibody Datasheet

Name: Human IgG1 Anti SARS-CoV-2 Spike (S1) Antibody (CR3022)

Product Code: MAB12422-100 / MAB12422-500 / MAB12422-1000 / MAB12422-5mg

Batch #:

Date of Manufacture:

Product Description: This is a recombinant monoclonal antibody.

Clone Number: CR3022

Isotype: Human IgG1, Kappa

Amount: 0.1 mg / 0.5 mg / 1.0 mg / 5.0 mg

Concentration: 1.0 mg/ml

Presentation: Liquid

Buffer: PBS

Preservative: 0.02% Proclin 300

Immunogen: The original monoclonal antibody was generated by sequencing peripheral blood lymphocytes of a patient exposed to the SARS-CoV.

Purification: Protein A affinity purified.

Specificity: Antibody binds to both SARS-CoV and SARS-CoV-2 (COVID-19) with high affinity at amino acids 318-510 in the S1 domain of the Spike protein. Antibody also recognizes SARS-CoV-2 variant RBD proteins (UK, REC31946; South African, REC31945; Indian, REC31971; Brazilian, REC31961).

Applications: ELISA, NTRL, SPR, Crystallography.

Matched Pair: Suitable for use as a capture and detection antibody in ELISA assays. As a capture antibody with MAB12441, MAB12443 and MAB12444 as detection antibodies. As a detection antibody with MAB12446 as the capture antibody (see data below).

Usage Guidelines

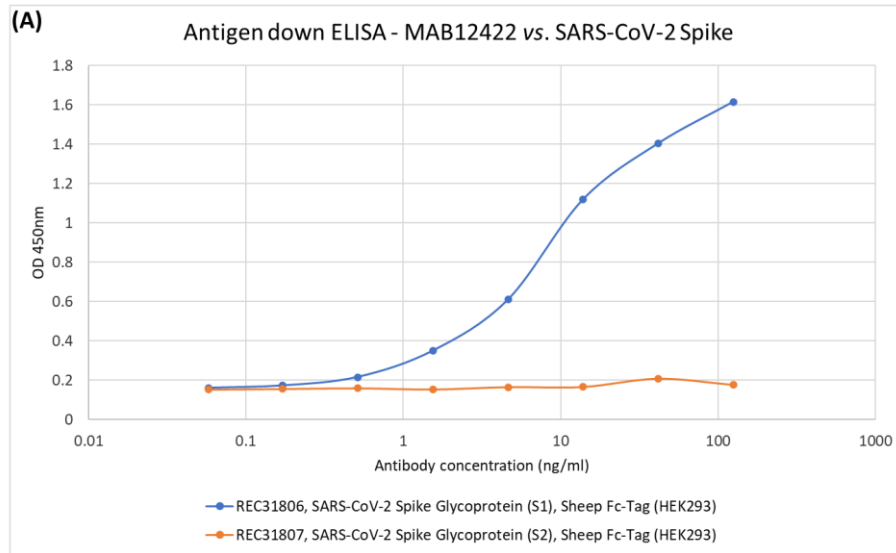
Short Term Storage: Up to 3 months at +4°C

Long Term Storage: -20°C

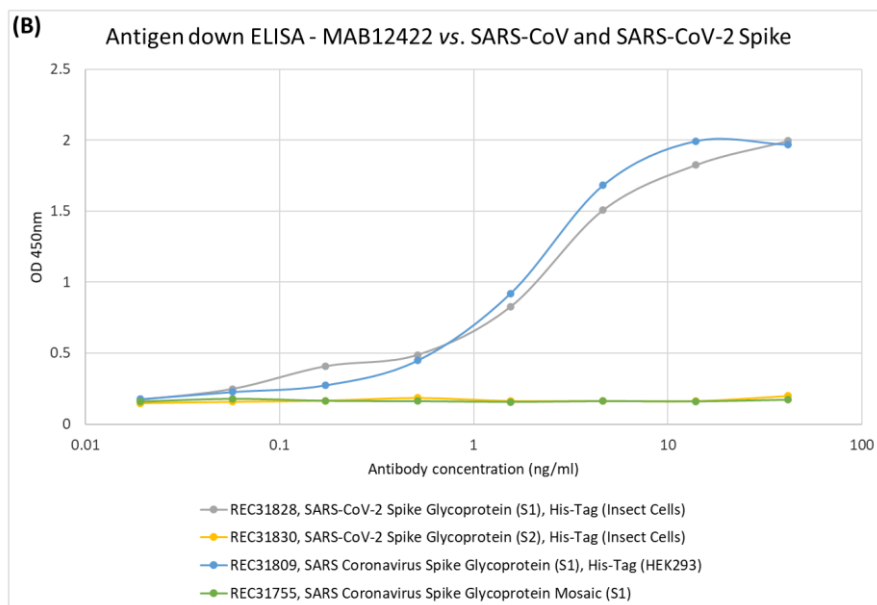


Antigen-down ELISA: Plate coated with the target proteins at 5 µg/ml. Primary antibodies were titrated on a 3-fold serial dilution starting at 125 ng/ml (A) or 41.6 ng/ml (B). Secondary antibody anti-human IgG conjugated to HRP used in the assay, at 1:4000 concentration.

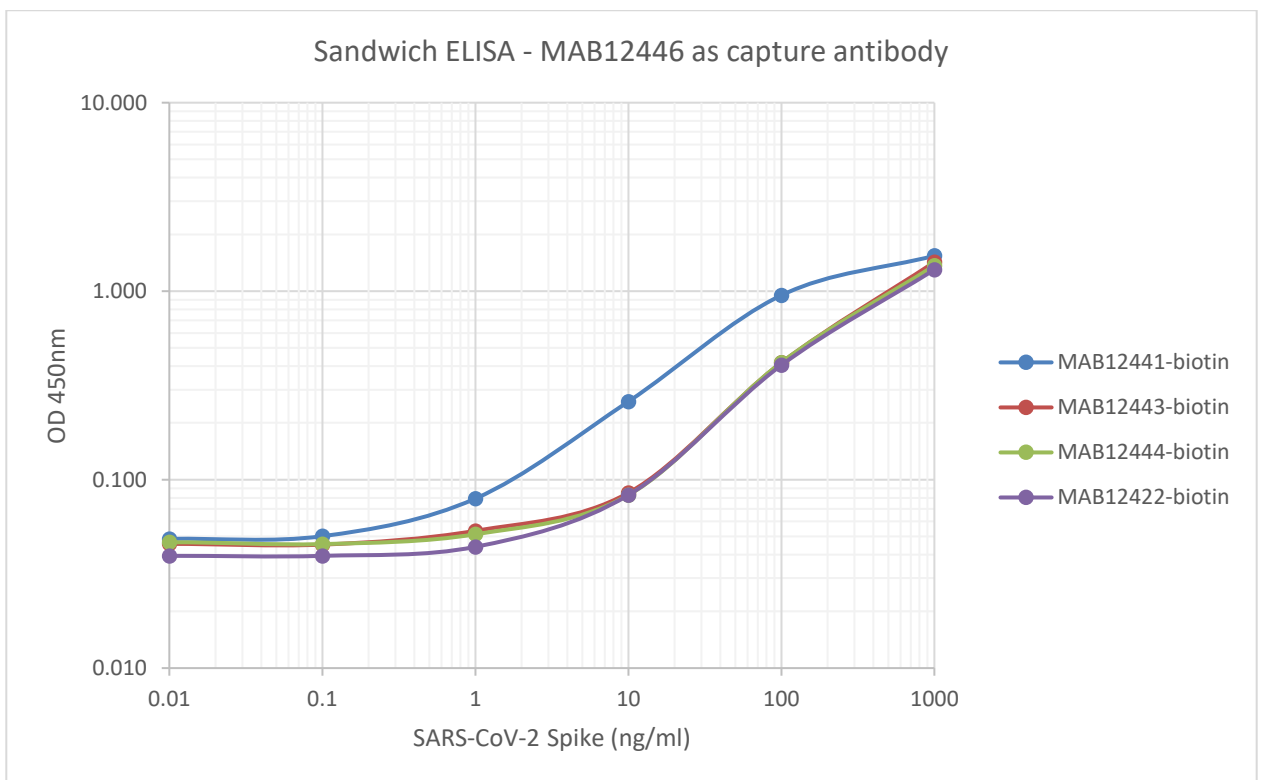
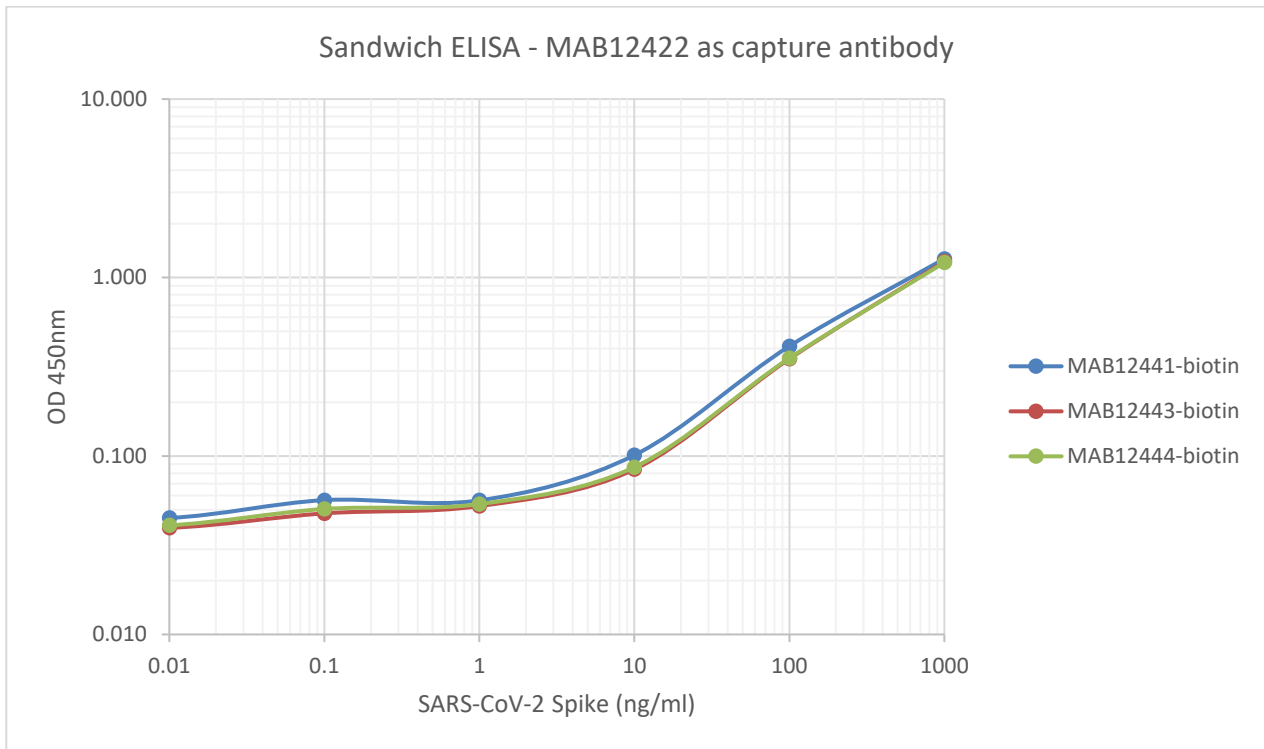
(A) Antibody recognised SARS-CoV-2 spike protein subunit 1 (aa 1-674), but not SARS-CoV-2 spike protein, subunit 2 (aa 685-1211).



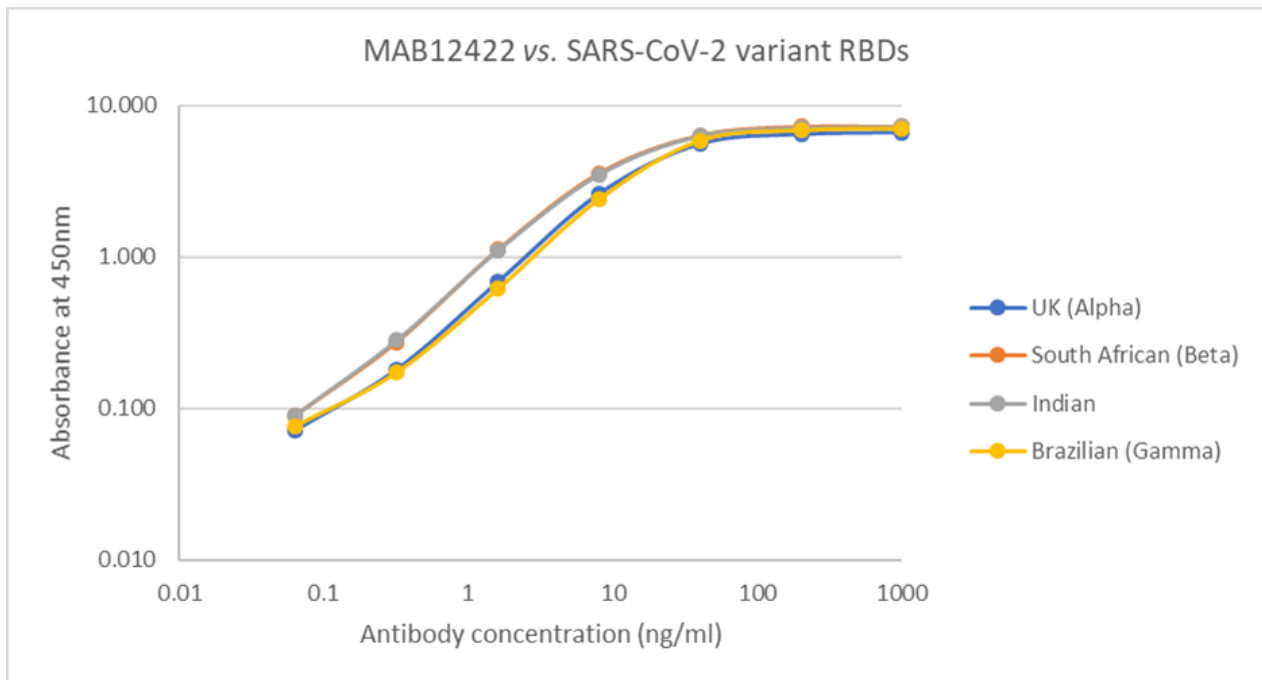
(B) Antibody recognised spike protein from SARS-CoV (subunit 1, aa 1-666) and SARS-CoV-2 (subunit 1, aa 1-674), produced in mammalian and insect cells, respectively. Antibody did not recognise SARS-CoV-2 spike protein, subunit 2 (aa 685-1211) or a spike mosaic protein, containing subunit 1 amino acids 12-53, 90-115, 171-203.



Sandwich ELISA: SARS-CoV-2 full-length Spike (REC31868) was the capture analyte. Plates were coated with 5µg/ml of capture antibodies. Spike protein was added at varying concentrations from 1µg/ml to 0.001ng/ml. Plates were incubated with biotin-labelled detection antibodies at 1µg/ml.



Direct ELISA: Plate was coated with 100µl of variant RBD proteins (UK, REC31946; South African, REC31945; Indian, REC31971; Brazilian, REC31961), at 1µg/ml and then incubated with 100µl MAB12422 antibody, diluted from 1000ng/ml to 0.064ng/ml. Diluted secondary IgG HRP antibody (100µl at 1:10,000) was then added. 100µl of TMB substrate (M0701A) was added in all wells and the reaction stopped after 10 min. with 1M HCl and the plate read at 405/450nm.



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QC

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Products are for Research Use or for Further Manufacturing Use only. Not for Diagnostic or Therapeutic Use.