

## COVID 19 Spike S glycoprotein Coronavirus Recombinant Antibody | COVID-19 recombinant antibody

Anti-COVID-19 & SARS-CoV S glycoprotein [CR3022], Human IgG1, Kappa

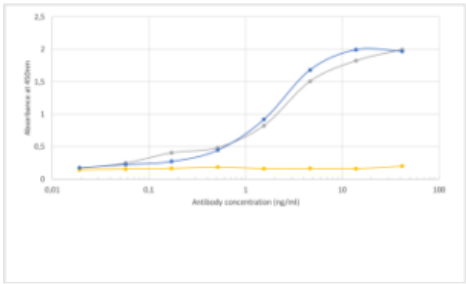
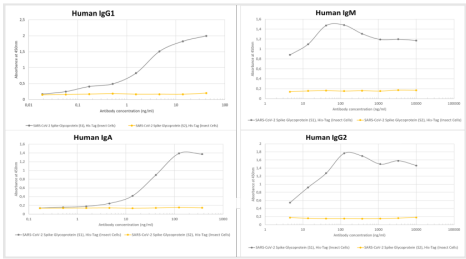
|                              |                                                                   |                                                    |
|------------------------------|-------------------------------------------------------------------|----------------------------------------------------|
| CATALOG #<br><b>AAA72046</b> | REACTIVITY<br><b>SARS-CoV-2 (COVID-19) &amp; SARS Coronavirus</b> | APPLICATIONS<br><b>ELISA, Neutralization Assay</b> |
|------------------------------|-------------------------------------------------------------------|----------------------------------------------------|

### PRODUCT SYNONYMS

COVID 19 Spike S glycoprotein Coronavirus; Monoclonal Recombinant Antibody; Anti-COVID-19 & SARS-CoV S glycoprotein [CR3022]; Human IgG1; Kappa; 2019 Novel Coronavirus; Coronavirus; CoV; COVID-19 virus; HCoV-2; Human Coronavirus 2019; SARS2; SARS-CoV-2; Severe acute respiratory syndrome coronavirus 2; Spike S glycoprotein; COVID-19 recombinant antibody

### PRODUCT SPECIFICATIONS

|                                                           |                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity                                                | SARS-CoV-2 (COVID-19) & SARS Coronavirus                                                                                                                                                                                                                                                                                                         |
| Clonality                                                 | Monoclonal                                                                                                                                                                                                                                                                                                                                       |
| Isotype                                                   | Human IgG1                                                                                                                                                                                                                                                                                                                                       |
| Clone Number                                              | CR3022                                                                                                                                                                                                                                                                                                                                           |
| 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) |
| Purity/Purification                                       | Protein A affinity purified                                                                                                                                                                                                                                                                                                                      |
| Form/Format                                               | PBS with 0.02% Proclin 300.                                                                                                                                                                                                                                                                                                                      |
| Concentration                                             | 1 mg/ml (varies by lot)                                                                                                                                                                                                                                                                                                                          |
| Applicable Applications for COVID-19 recombinant antibody | ELISA, NTRL (Neutralization Assay), Crystallography                                                                                                                                                                                                                                                                                              |
| Immunogen                                                 | The original monoclonal antibody was generated by sequencing peripheral blood lymphocytes of a patient exposed to the SARS-CoV.                                                                                                                                                                                                                  |
| Note                                                      | Clone CR3022 is available in human IgG1 and rabbit IgG isotype formats. The chimeric rabbit antibody was made using the variable domain sequences of the original Human IgG1 format, for improved compatibility with existing reagents, assays and techniques.                                                                                   |
| Preparation and Storage                                   | Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.                                                                                                                                                                                                                                                                 |

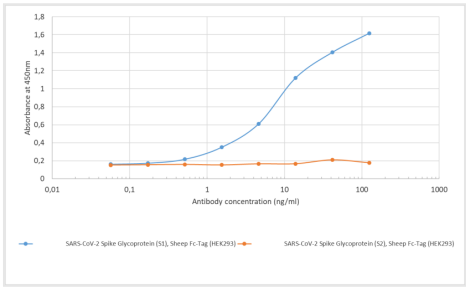


ELISA

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 ug/ml. A 3-fold serial dilution from 41.6 ng/ml was performed; from 370 ng/ml and from 10000 ng/ml. Human IgM, human IgA and human IgG2 were HRP-conjugated and for the detection of human IgG1 a 1:4000 dilution of HRP-labelled anti-human IgG antibody was used.

ELISA

Binding curve of anti-COVID-19 & SARS-CoV S glycoprotein antibody CR3022 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 ug/ml. A 3-fold serial dilution from 41.6 ng/ml was performed. For detection, a 1:4000 dilution of HRP-labelled anti-human IgG antibody was used.



ELISA

Binding curve of anti-COVID-19 & SARS-CoV S glycoprotein antibody CR3022 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 ug/ml. A 3-fold serial dilution from 125 ng/ml was performed. For detection, a 1:4000 dilution of HRP-labelled anti-human IgG antibody was used.

ADDITIONAL INFORMATION

|                                                               |                                                                                                                                                                                       |
|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for COVID-19 recombinant antibody | Recombinant monoclonal antibody to COVID-19 & SARS-CoV S glycoprotein. Manufactured using Recombinant Platform with variable regions (i.e. specificity) from the B-cell clone CR3022. |
| References                                                    | Meulen et al. Human Monoclonal Antibody Combination against SARS Coronavirus: Synergy and Coverage of Escape Mutants PLoS Med. 2006 Jul; 3(7): e237 PMID:16796401                     |

NCBI AND UNIPROT INFORMATION

|                     |        |
|---------------------|--------|
| UniProt Accession # | P59594 |
|---------------------|--------|

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | [contact@aaabiotech.com](mailto:contact@aaabiotech.com)  
Online datasheet: <https://stage.aaabiotech.com/monoclonal/covid-19-spike-s-glycoprotein-coronavirus-recombinant-antibody-clone-cr3022-neutralization-assay-elisa/72046>