

Human COVID 19 Spike S glycoprotein Coronavirus Monoclonal Antibody | anti-Covid-19 antibody

Anti-COVID-19 & SARS-CoV S glycoprotein [CR3022]

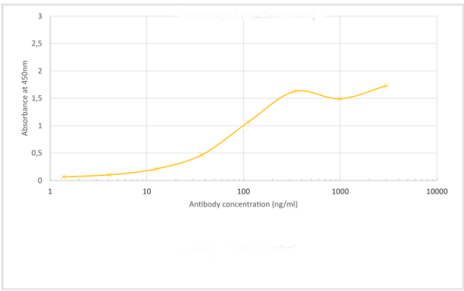
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA72183	Human	SARS-CoV-2 (COVID-19) & SARS Coronavirus	Immunofluorescence, Neutralization Assay, ELISA

PRODUCT SYNONYMS

COVID 19 Spike S glycoprotein Coronavirus; Monoclonal Antibody; Anti-COVID-19 & SARS-CoV S glycoprotein [CR3022]; 2019 Novel Coronavirus; Coronavirus; CoV; COVID-19 virus; HCoV-2; Human Coronavirus 2019; SARS2; SARS-CoV-2; Severe acute respiratory syndrome coronavirus 2; Spike protein; COVID19; COVID 19; S protein; SARS-CoV S protein; S glycoprotein; E2; Peplomer protein; Spike protein S1; SARS Coronavirus; SARS CoV 2; 2019-nCoV; anti-Covid-19 antibody

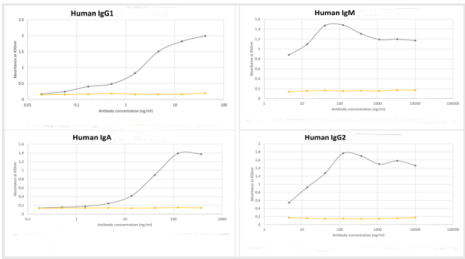
PRODUCT SPECIFICATIONS

Host	Human
Reactivity	SARS-CoV-2 (COVID-19) & SARS Coronavirus
Clonality	Monoclonal
Isotype	Human IgM, kappa
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	Purified antibody. Affinity Purified using a recombinant lectin column
Form/Format	PBS with 0.02% Proclin 300.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-Covid-19 antibody	IF (Immunofluorescence), SPR (Surface Plasmon Resonance), NTRL (Neutralization Assay), ELISA
Chimeric Use Statement	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.
PMID	16796401
Preparation and Storage	Store at 4 degree C for up to 3 months. For longer storage, aliquot and store at -20 degree C.



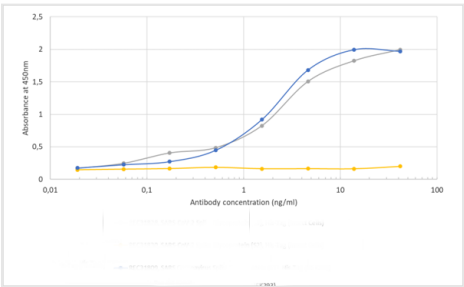
ELISA

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 2.5ug/ml. was conjugated to HRP and titrated on a 3-fold serial dilution starting at 3,000 ng/ml.



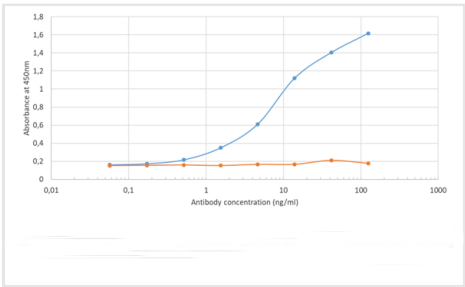
ELISA

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 5ug/ml. A 3-fold serial dilution from 41.6 ng/ml was performed using from 370 ng/ml for and from 10000 ng/ml for and 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 5ug/ml. A 3-fold serial dilution from 41.6 ng/ml was performed using 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 5ug/ml. A 3-fold serial dilution from 125 ng/ml was performed using For detection, a 1:4000 dilution of HRP-labelled anti-human IgG antibody was used.

ADDITIONAL INFORMATION

Related Product Information for anti-Covid-19 antibody	Recombinant monoclonal antibody to COVID-19 & SARS-CoV S glycoprotein. Recombinant Platform with variable regions (i.e. specificity) from the B-cell clone CR3022. The original monoclonal antibody was generated by sequencing peripheral blood lymphocytes of a patient exposed to the SARS-CoV.
Product Categories/Family for anti-Covid-19 antibody	virus ; virology ; SARS ; coronavirus ; 2019-nCoV ; 2019-nCoV ; COVID-19 ; SARS-CoV-2
References	ter Meulen et al. Human Monoclonal Antibody Combination against SARS Coronavirus: Synergy and Coverage of Escape Mutants PLoS Med. 2006 Jul; 3(7): e237 Note on publication: Describes the discovery and original characterization of this antibody.

NCBI AND UNIPROT INFORMATION

NCBI GI #	30173397
NCBI GeneID	1489668
UniProt Accession #	P59594 ; Q6QU82 ; Q7T696 ; Q7TA19 ; Q7TFA2 ; Q7TFB1 ; Q80BV6
Molecular Weight	139,125 Da
NCBI Official Full Name	Spike glycoprotein

NCBI Official Symbol	S
NCBI Official Synonym Symbols	E2
NCBI Protein Information	E2 glycoprotein precursor; spike glycoprotein
UniProt Protein Name	Spike glycoprotein
UniProt Gene Name	S
UniProt Synonym Gene Names	S glycoprotein
UniProt Entry Name	SPIKE_CVHSA

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.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/covid-19-spike-s-glycoprotein-coronavirus-antibody-clone-cr3022-immunofluorescence-surface-plasmon-resonance-neutralization-assay-elisa/72183>