

Anti-Spike protein [4A8] Standard Size Ab02743-10.7

This antibody is in our proprietary AbFab2™ recombinant F(ab2) format - based on Human IgG1 sequence with a short dimerization domain to improve stability and a his tag.

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.

Isotype and Format: Human F(ab)₂, AbFab2™ His-Tagged, Kappa

Clone Number: 4A8

Alternative Name(s) of Target: SARS CoV 2 S glycoprotein; COVID-19 Spike protein; RBD; Receptor Binding Domain; E2 glycoprotein; E2; Human coronavirus 2 spike glycoprotein; Peplomer protein; S glycoprotein; SARS coronavirus 2 S protein; SARS coronavirus 2 Spike Protein; SARS CoV 2 Spike protein; SARS CoV 2; SARS-CoV-2 S protein; SARSCoV2; SARS-COV-2 S protein; SARS-COV-2 Spike glycoprotein; SARSCOV2 Spike protein; Severe acute respiratory syndrome 2 spike glycoprotein; Severe acute respiratory syndrome virus 2 spike glycoprotein; Spike glycoprotein; 2019-nCoV

UniProt Accession Number of Target Protein: P0DTC2

Published Application(s): functional assay, neutralizing, ELISA, FC

Published Species Reactivity: SARS Coronavirus 2 (SARS-Cov-2)

Immunogen: This antibody was isolated from the blood of recovered SARS CoV2 patients.

Specificity: This antibody is specific for S1 and S-ECD of the SARS CoV2 spike protein. SARS-CoV-2 is a positive-sense single-stranded RNA virus[5] that is contagious in humans.

Application Notes: The binding profile of this antibody was determined by performing an ELISA on SARS-CoV-2 S, S1, S2 or RBD protein using the human version of this antibody. Furthermore a neutralization experiment on Vero-E6 cells infected with SARS CoV2 was done using the human IgG1 version of this antibody. The binding of the human version was also characterized using biolayer interferometry. A flow cytometric receptor binding inhibition assay was also performed on the human version of this antibody incubated in SARS-CoV-2S protein and then incubated with ACE2-293T cells. The complex of S-ECD and the human version of this antibody was characterized using cryo electromicroscopy (Chi et al, 2020; pmid:32571838).

Antibody First Published in: Chi et al. A neutralizing human antibody binds to the N-terminal domain of the Spike protein of SARS-CoV-2. Science. 2020 Aug 7;369(6504):650-655. [PMID:32571838](https://pubmed.ncbi.nlm.nih.gov/32571838/)

Note on publication: Monoclonal antibodies (mAbs) from 10 convalescent COVID-19 patients were isolated and characterized.

Product Form

Size: 100 µg Purified antibody.

Purification: Purified by Immobilized Metal Affinity Chromatography

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.