Anti-Spike protein [4A8] Standard Size Ab02743-16.0

This antibody does not have a J-chain.

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 IgA1, 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
Note on publication: Monoclonal antibodies (mAbs) from 10 convalescent COVID-19 patients were isolated and characterized.

Product Form

Size: 50 µg Purified antibody.
Purification: Affinity Purified using a recombinant lectin column
Supplied In: PBS with 0.02% Proclin 300.
Storage Recommendation: Store at 4^{o}C for up to 3 months. For longer storage, aliquot and store at -20^{o}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.