Anti-Spike Protein [CV1] Standard Size Ab02018-1.7

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

This chimeric mouse 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: Mouse F(ab)2, AbFab2™ His-Tagged, Lambda
Clone Number: CV1
Alternative Name(s) of Target: S-protein; SARS-CoV2; SARS Coronavirus 2; SARS-CoV-2; SARS CoV 2; 2019-nCoV; Severe acute respiratory syndrome coronavirus 2; Spike protein; S protein; SARS-CoV 2 S protein; S glycoprotein; E2; Peplomer protein; SARS-CoV2
UniProt Accession Number of Target Protein: P0DTC2
Published Application(s): neutralize, therapeutic, ELISA, FC
Published Species Reactivity: SARS Coronavirus 2
Immunogen: The original antibody was generated by isolating B-cells from the peripheral blood mononuclear cells (PBMCs) of SARS CoV2 infected patients, after the serum neutralizing activity was confirmed.
Specificity: This antibody binds the ectodomain encoded by amino acid residues 1-1208 of the SARS CoV 2 spike protein.
Application Notes: This antibody is recommended for diagnosis and/or treatment of SARS CoV 2 or 2019-nCoV. CV1 binds an epitope outside the SARS CoV 2 RBD was found to be weakly neutralizing (IC50=15µg/ml). ELISA was used to confirm the binding of SARS CoV 2 positive serum samples to the entire ectodomain and the receptor binding domain of the spike protein. Specific binding of the mAb to SARS CoV 2 to ectodomain was confirmed with biolayer interferometry. Phycoerythrin labelled mAb was used to stain 293E cells transfected with wild type SARS CoV 2 and were analysed by flow cytometry (Seydoux et al., 2020).
Antibody First Published in: Seydoux et al. Characterization of neutralizing antibodies from a SARS-CoV-2 infected individual PMID:32511342
Note on publication: Describes the generation and characterization of this antibody from PBMCs of infected patients.

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^{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.