

## Anti-Spike Protein [CV1] Standard Size Ab02018-10.7

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, 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°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.