Anti-SARS-CoV S glycoprotein [256] Standard Size Ab01668-15.0

This antibody does not have a J-chain and therefore presents as a hexamer, rather than a pentamer.

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 IgM, Lambda
Clone Number: 256
Alternative Name(s) of Target: Spike protein; S protein; SARS-CoV S protein; S glycoprotein; E2; Peplomer protein; Spike protein S1
UniProt Accession Number of Target Protein: P59594
Published Application(s): NTRL, ELISA
Published Species Reactivity: SARS Coronavirus
Immunogen: The original antibody was produced by panning against GD03-RBD-C9, two non-immune human Ab phage display libraries and neutralizing activity was tested against pseudotyped viruses.
Specificity: This antibody specifically binds the amino acids 472 and 480 in the S1 domain of the SARS-CoV Spike protein (Tor2 and GD03).
Application Notes: This antibody inhibits the association of SARS-CoV S protein to the angiotensin-converting enzyme 2 (ACE2) receptor by binding to specific amino acids on the S1 domain of the spike protein of the virus. 256-IgG1 was capable of neutralizing both the mutations of the spike protein at D480A and D480G. It also neutralized Tor2 and marginally neutralized GD03. Neither of the antibodies 11A nor 80R competed with 256 IgG1 for binding to Tor2 suggesting that the binding epitope of 256 was different from that of 80R and 11A (Sui et. al, 2008)
Antibody First Published in: Sui et al. Broadening of neutralization activity to directly block a dominant antibody-driven SARS-coronavirus evolution pathway. PLoS Pathog. (2008); 4(11):e1000197. PMID:18989460
Note on publication: Describes the methods for generation of a broadly neutralizing antibody by using a combination of chain-shuffling as well as hot-spot CDR mutagenesis.

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.