

Anti-SARS-CoV S glycoprotein [11A] Standard Size Ab01667-3.3

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

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 IgG2b, [Fc Silent™](#), Lambda

Clone Number: 11A

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 (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 strain GD03. 11A potently inhibited GD03-RBD's binding to ACE2 expressing 293T cells. Kinetic analysis of 11A IgG binding to GD03-RBD demonstrated high affinity interaction ($KD = 2.260.7$ nM). Single amino acid changes at either position D480A or D480G resulted in complete loss of 11A binding. (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: 200 µg Purified antibody.

Purification: Protein A affinity purified

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.