

## Anti-SARS-CoV S glycoprotein [11A] Standard Size Ab01667-3.0

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, 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 ( $K_D = 2.260.7$  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.