

Anti-Spike protein [EY6A] Bulk Size Ab02057-3.3-BT

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™](#), Kappa

Clone Number: EY6A

Alternative Name(s) of Target: SARS CoV 2 S glycoprotein; COVID-19 Spike protein; RBD; Receptor Binding Domain; E2 glycoprotein; E2; Human coronavirus 2 spike glycoprotein; Peplomer protein; S glycoprotein; SARS coronavirus 2 S protein; SARS coronavirus 2 Spike Protein; SARS CoV 2 Spike protein; SARS CoV 2; SARS-CoV-2 S protein; SARSCoV2; SARS-COV-2 S protein; SARS-COV-2 Spike glycoprotein; SARSCOV2 Spike protein; Severe acute respiratory syndrome 2 spike glycoprotein; Severe acute respiratory syndrome virus 2 spike glycoprotein; Spike glycoprotein; 2019-nCoV

UniProt Accession Number of Target Protein: P0DTC2

Published Application(s): NTRL, Surface Plasmon Resonance, therapeutic, ELISA, IF

Published Species Reactivity: SARS Coronavirus 2 (SARS-Cov-2)

Immunogen: The original antibody was isolated by cloning antibody genes from blood derived plasmablasts of a Covid-19 infected patient in the convalescent phase.

Specificity: This antibody binds tightly (KD of 2 nM) to the receptor binding domain (RBD) the of the SARS-CoV-2. It also cross reacts with SARS-CoV-1. This antibody recognizes a highly conserved epitope on away from the ACE2 receptor binding domain.

Application Notes: EY6A binds S1 domain of SARS-CoV-2 and also cross reacts with SARS-CoV-1. The binding was confirmed by ELISA. Further confirmation of binding of EY6A to SARS-CoV-2 infected cells was done by immunofluorescence. Surface plasmon resonance (SPR) measurements for EY6A Fab showed high affinity binding to immobilised SARS-CoV-2 RBD (KD = 2 nM). EY6A did not completely block binding of ACE2 to RBD, but was successful in neutralizing SARS-CoV-2 infection in Vero E6 cells (Zhou et al., 2020).

Antibody First Published in: Zhou et al. Structural basis for the neutralization of SARS-CoV-2 by an antibody from a convalescent patient. *BioRxiv* (2020) [PMID:](#)

Note on publication: Describes the generation, characterization and structural complex formed by this antibody with the receptor binding domain of the SARS-CoV-2.

Product Form

Size: 1 mg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. 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.