Anti-Spike protein [EY6A] Standard Size Ab02057-3.0

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, 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:

200 µg Purified antibody.
Purification: Protein A affinity purified
Supplied In: PBS with 0.02% Proclin 300.
Storage Recommendation: Store at 4ºC for up to 3 months. For longer storage, aliquot and store at -20ºC.
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.