

Anti-SARS-CoV S glycoprotein [1B5] Standard Size Ab01665-11.0

Isotype and Format: Human IgG2, Kappa

Clone Number: 1B5

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 generated by immunizing a non human transgenic animal XENOMOUSE® IgG2k mice against S1 protein-Ig fragments (ectodomain) of the S Protein (Tor2).

Specificity: This antibody specifically binds the amino acids 318-510 in the S1 domain of the SARS-CoV Spike protein (Urbani strain).

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. The originally characterized antibody had a neutralizing titer 200TCID₅₀ of 12.5 µg/ml (Coughlin et al., 2006) and IC₅₀ of 2.84 µg/ml when incubated with S12-510- Fc recombinant protein (Coughlin et al., 2009). Purified 1B5 binds to RBD region with a unique CDR3 sequence. When used in combination with 4D4 the lack of synergistic effect indicated that the mAbs 4D4 and 1B5 likely interact with closely positioned conformational epitopes and compete with each other for binding (Coughlin et al., 2009). ELISA.

Antibody First Published in: Coughlin et al. Generation and characterization of human monoclonal neutralizing antibodies with distinct binding and sequence features against SARS coronavirus using XenoMouse® Virology 361 (2007) 93-102. [PMID:17161858](#)

Note on publication: Describes the generation and characterization of this antibody.

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.