

Anti-SARS-CoV S glycoprotein [A11] Standard Size Ab01669-15.0

This antibody does not have a J-chain and therefore presents as a hexamer, rather than a pentamer.

This full-length, reformatted human antibody was made using the variable domain sequences of the original Human scFv format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgM, Lambda

Clone Number: A11

Alternative Name(s) of Target: Spike protein; S protein; SARS-CoV S protein; S glycoprotein; E2;

Peplomer protein; Spike protein S2

UniProt Accession Number of Target Protein: P59594

Published Application(s): WB, ELISA, IF

Published Species Reactivity: SARS Coronavirus

Immunogen: The original antigen was produced by subcloning the scFv gene fragment in an expression vector like pET32b, and transforming the vector into an E.coli strain BL21 and inducing expression by IPTG (isopropyl-b-D-thiogalactopyranoside). A scFv phage antibody library was constructed in fd phage. The antibody was produced by panning against S2b, two non-immune human Ab phage display libraries and neutralizing activity was tested against pseudotyped viruses. Antigen binding antibodies were identified by phage ELISA.

Specificity: This antibody specifically binds the epitope in the S2 domain of the spike protein in the region of Leu803-Ala828.

Application Notes: This antibody binds the amino acids Leu803-Ala828 in the S2 domain of the SARS-CoV. S2 domain mediates membrane fusion between the virus and the host cell. The binding specificity of antibody to S2b fragment of the viruse was checked by ELISA. Immunofluorescence staining was used to stain infected Vero cells using the A11-scFv. A11-scFv recognized recombinant spike protein S2-b during western blot analysis (Leung et al., 2008).

Antibody First Published in: Leung et al. Development of human single-chain antibodies against SARS-associated coronavirus. Intervirology. (2008); 51(3):173-81. PMID:18724064

Note on publication: Describes the development of a single chain antibody against the S2 domain of the spike protein of the SARS coronavirus.

Product Form

Size: 50 μg Purified antibody.

Purification: Affinity Purified using a recombinant lectin column

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.