

Humanized Monoclonal Antibody (IgG) against SARS-CoV-2 Spike Protein-1 Receptor-binding Domain (S1RBD)

Catalog Number: 41A245

Size: 100µg

Type: Genetically engineered recombinant monoclonal IgG antibody

Introduction to the molecule

The SARS-CoV-2 glycosylated spike (S) protein highly exposed on the viral surface is a major determinant for virus binding and invasion into host cells, which is a main target for neutralization antibody. The receptor-binding domain (RBD) in SARS-CoV-2 S protein is responsible for binding to human and bat angiotensin-converting enzyme 2 (ACE2) receptors.

Production:

The cDNA encoding the highly variable region of the antibody recognizing S1RBD from mammalian cells were identified by phage display library, fused with the Fc fragment of human IgG1, and expressed in Chinese Hamster Ovary (CHO) cells.

Formulation, Reconstitution, and Storage

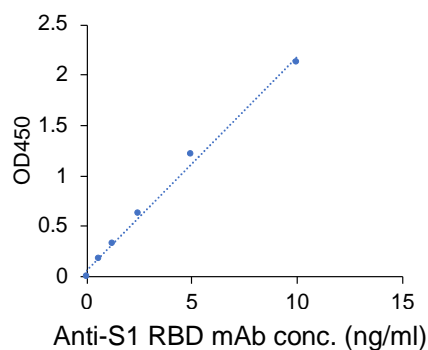
Lyophilized from sterile PBS, pH 7.4. Lyophilized protein can be stored at 2°C to 8°C for short-term, and at -20°C to -80°C for long term storage. For reconstitution, add 100 µl of deionized water, mix gently and incubate the reconstituted product for 10 minutes at room temperature prior to use. Reconstituted protein should be kept at -20°C to -80°C. Avoid repeated freeze-thaw cycles.

Application/Usage

ELISA and other applications. Optimal concentration/dilution should be determined by the end user.

Affinity Assay

The binding between immobilized S1RBD (41A231) and the anti-SARS-CoV-2 S1RBD 41A245.



Note: 1 ng/ml = 1.8×10^{-2} nM

Reference

1. Shajahan A, *et al.* (2020) Deducing the N- and O-glycosylation profile of the spike protein of novel coronavirus SARS-CoV-2. bioRxiv, <https://doi.org/10.1101/2020.04.01.020966>.
2. Walls, A C, *et al.* (2020) Structure, Function, and Antigenicity of the SARS-CoV-2 Spike Glycoprotein. Cell, 181(2), 281-292.e6. <https://doi.org/10.1016/j.cell.2020.02.058>.