

Anti-Spike (SARS-CoV-2) Human Monoclonal Neutralization Antibody

CATALOG NUMBER: SCV2-SA-11m, 100 µg

Introduction

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the virus that causes COVID-19 (coronavirus disease 2019), the respiratory illness responsible for the COVID-19 pandemic. There are many thousands of variants of SARS-CoV-2 have been identified throughout the world since it was first identified Wuhan China from late 2019.

The genome of SARS-CoV-2 has 89% nucleotide identity with bat SARS-like-CoVZXC21 and 82% with that of human SARS-CoV. The phylogenetic trees of their orf1a/b, Spike, Envelope, Membrane and Nucleoprotein also clustered closely with those of the bat, civet and human SARS coronaviruses. However, the external subdomain of Spike's receptor binding domain (RBD) of SARS-CoV-2 shares only 40% amino acid identity with other SARS-related coronaviruses.

Description Human monoclonal anti-spike neutralization (SARS-CoV-2) antibody

Applications ELISA, Neutralization Assay, IF, FC, etc.

Immunogen Recombinant spike protein of SARS-CoV-2 South Africa variant

Specificity Neutralizing the conformational spike proteins of SARS-CoV-2, including South Africa variant

(B.1.351), UK variant (B.1.1.7), Indian variant (B.1.617), the 614G variant. May neutralize some

other variants as well.

Purification Affinity chromatography

Isotype Human IgG

Storage Store at -20 °C; Stable for 6-months from the date of shipment when kept at 4 °C. Non-hazardous.

Concentration 1 μg/μl in PBS with 40% glycerol

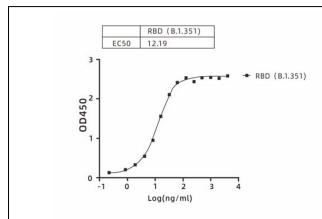


Figure 1. Titration curves of anti-spike neutralization antibody (SCV2-SA-11m).

96-well corning ELISA plate was coated with SARS-CoV-2 spike RBD protein (Cat# SCV2-RBD-SA50p) at a concentration of 2 µg/ml, and with a EC50 of 12.19 ng/ml.

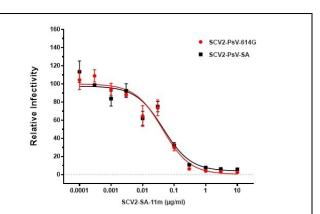


Figure 2. Pseudoviral particle (PP) infection assay challenged by neutralizing antibody (SCV2-SA-11m). HEK293-ACE2 cells infected with SARS-CoV-2 pseudoviral particles under various amounts of neutralizing antibodies, with IC50 of 42.8 ng/ml (SCV2-PsV-614G) and 45 ng/ml (SCV2-PsV-SA)