Anti-Spike (SARS-CoV-2) Rabbit Polyclonal Antibody

CATALOG NUMBER: SCV2-S-300, 100 µg, 1 mg

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. Many SARS-CoV-2 variants have been identified throughout the world since it's outbreak in late 2019; some of more particular importance due to their potential for increased transmissibility, increased virulence, and reduced effectiveness of vaccines against them.

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 Rabbit polyclonal anti-spike (SARS-CoV-2) antibody

Immunogen Genetic immunization with full length spike cDNA and then boosted once with spike protein of SARS-CoV-2

Applications Western blot (1:500-1:2000), ELISA (1:40,000), Neutralization Assay, and other applications

Purification Protein G immunoaffinity chromatography

Concentration 2 µg/µl in PBS

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

Specificity Reacts with spike protein of all SARS-CoV-2 variants tested, including **Alpha** (B.1.1.7 lineage), **Beta** variant (B.1.351 lineage), **Delta** variant (B.1.617.2 lineage), **Omicron** variant (B.1.1.529 lineage) and the **BA.2** subvariant. It also cross-reacts with SARS-1 spike protein.

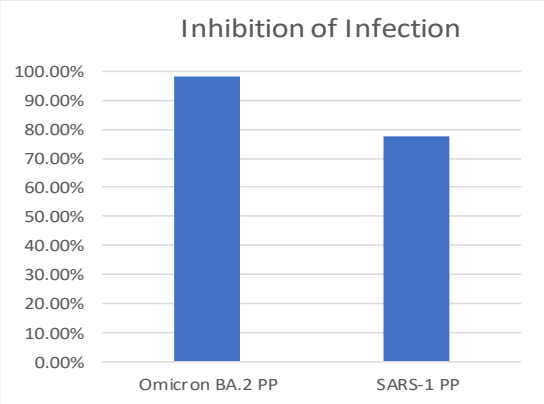

Figure 1. Neutralization assay using the MMLV viral membrane particles pseudotyped with SARS-CoV-2 **Omicron BA.2** spike protein (Omicron BA.2 PP, Cat.# SCV2-PsV-OmiBA2) or the **SARS-1** spike pseudoviral particles (SARS-1 PP, Cat.# SCV1-PsV-003) showed that this antibody,at 0.135 uM, inhibits 98.31% or 77.80% of the infection of the respective pseudoviral particles of the HEK293-ACE2 cells via the spike-ACE2 path.

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