

12-8258: Anti-SARS-CoV-1, Spike (Clone COV1-57)-Purified No Carrier Protein

Clonality : Monoclonal
Clone Name : COV1-57
Isotype : Human IgG1k

Description

Specificity: COV1-57 is highly specific for the SARS-CoV-1 and SARS-CoV-2 prefusion spike protein (S2) distributed on the viral surface.

Antigen Distribution: Anti-SARS-CoV-1 recognizes antigens on infected cells, including respiratory epithelial cells.

Background: SARS-CoV-1, also known as the Severe Acute Respiratory Syndrome coronavirus, is a zoonotic virus that is believed to have originated from an animal reservoir, possibly horseshoe bats, and transmitted to humans¹. This virus primarily affects the respiratory system and can cause symptoms such as muscle pain, headache, fever, cough, dyspnea, and pneumonia^{1,2}. It was the first severe and readily transmissible new disease to emerge in the 21st century, with the capacity to spread globally via international air travel. The COV1-57 monoclonal antibody targets the prefusion spike protein of both SARS-CoV-1 and SARS-CoV-2, making it a cross-reactive antibody. Although it does not block the ACE2 receptor, COV1-57 functions as a neutralizing antibody, which means it can inhibit the virus's ability to infect host cells. The neutralizing activity of COV1-57 suggests that it can prevent the spike protein from undergoing the necessary conformational changes required for membrane fusion. The specific epitope targeted by COV1-57 remains unknown, which warrants further research to determine the precise binding site and mechanism of neutralization. This antibody could be valuable in therapeutic applications, especially in combination with other antibodies that target different epitopes.

Product Info

Amount : 250µg / 1 mg
Purity: >=90% monomer by analytical SEC and SDS-Page

Purification : Preparation: Recombinant antibodies are manufactured in an animal free facility using only in vitro protein free cell culture techniques and are purified by a multi-step process including the use of protein A or G to assure extremely low levels of endotoxins, leachable protein A or aggregates.
Concentration: >=1.0 mg/ml

Content : Formulation: This recombinant monoclonal antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein, potassium, calcium or preservatives added. Due to inherent biochemical properties of antibodies, certain products may be prone to precipitation over time. Precipitation may be removed by aseptic centrifugation and/or filtration.

Storage condition : This antibody may be stored sterile as received at 2-8°C for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at <= -70°C. Avoid Repeated Freeze Thaw Cycles.

Application Note

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