

12-8261: Anti-SARS-CoV-1, Spike RBD (Clone COV1-58)-Purified No Carrier Protein

Clonality : Monoclonal
Clone Name : COV1-58
Isotype : Human IgG1Lambda

Description

Specificity: COV1-58 targets the receptor-binding domain (RBD) of the SARS-CoV-1 prefusion spike protein (S2), located 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. COV1-58 is a monoclonal antibody that specifically targets the receptor-binding domain (RBD) of the SARS-CoV-1 spike protein. This antibody does not block the ACE2 receptor directly but serves as a neutralizer by preventing the virus from entering host cells. By binding to the RBD, COV1-58 likely interferes with the spike protein's ability to engage with the ACE2 receptor, thus neutralizing the virus. Its specificity for the RBD makes COV1-58 a crucial tool in neutralizing SARS-CoV-1 and offers potential in therapeutic applications, including the design of antibody cocktails to improve treatment efficacy.

Product Info

Amount : 250µg / 1 mg
Purity: $\geq 90\%$ monomer by analytical SEC and SDS-Page
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.

Purification : Concentration: ≥ 1.0 mg/ml
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.

Content :

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 $\leq -70^\circ\text{C}$. Avoid Repeated Freeze Thaw Cycles.

Application Note

N