

12-8262: Anti-SARS-CoV-1, Spike RBD (Clone COV1-62)-Purified No Carrier Protein

Clonality : Monoclonal
Clone Name : COV1-62
Isotype : Human IgG1Lambda

Description

Specificity: COV1-62 targets the 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. The COV1-62 monoclonal antibody targets the receptor-binding domain (RBD) of the SARS-CoV-1 spike protein and does not cross-react with the SARS-CoV-2 spike protein. Although it does not block the ACE2 receptor, COV1-62 acts as a neutralizing antibody, indicating it can inhibit viral entry into host cells through a different mechanism. This could involve preventing the spike protein from achieving the necessary conformations for fusion with the host cell membrane. The neutralizing capability of COV1-62, despite its lack of ACE2 blocking, underscores the importance of targeting various critical sites within the RBD for effective virus neutralization and highlights its potential in therapeutic settings.

Product Info

Amount : 250µg / 1 mg
Purity: ≥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
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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