

12-8245: Anti-Rift Valley Fever Virus, Glycoprotein (Gc) (Clone RVFV-250)-Purified No Carrier Protein

Clonality : Monoclonal
Clone Name : RVFV-250
Application : ELISA
Isotype : Human IgG1Lambda

Description

Specificity: Clone RVFV-250 binds to a region of domain II (DII) adjacent to the fusion loop of the Gc glycoprotein of Rift Valley Fever Virus (RVFV).

Antigen Distribution: RVFV is primarily found in hepatic cells, endothelial cells, and mononuclear phagocytes in the human body. This distribution reflects the virus's tendency to cause hepatitis, hemorrhagic fever, and encephalitis during infection.

Background: RVFV is a mosquito-borne phlebovirus primarily found in sub-Saharan Africa, especially in eastern and southern Africa. It infects both humans and ungulates (such as cows, goats, and sheep). RVFV causes a wide range of health effects, from mild illness to severe conditions like hemorrhagic disease, encephalitis, hepatitis, kidney injury, and retinitis. The virus can lead to spontaneous abortions in animals. RVFV outbreaks often occur during years of unusually heavy rainfall and flooding, as mosquitoes hatch more eggs, increasing transmission potential^{1,2}. RVFV-250 targets the Gc protein of RVFV. It has an IC50 value of 51 ng/mL for the MP-12 vaccine strain, indicating moderate neutralizing activity. However, it shows reduced neutralization potency against wild-type strains and SA51, with IC50 values of 120 ng/mL. RVFV-250 binds to specific regions on the Gc protein, contributing to its ability to neutralize the virus³.

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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