

12-8248: Anti-Rift Valley Fever Virus, Glycoprotein (Gn) (Clone RVFV-436)-Purified No Carrier Protein

Clonality : Monoclonal

Clone Name : RVFV-436

Application : ELISA

Isotype : Human IgG1

Description

Specificity: Clone RVFV-436 binds the Gn 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-426 is a notable monoclonal antibody (mAb) that targets the Gn protein of the virus. This antibody exhibited significant neutralizing activity, with an IC₅₀ value of 4.6 ng/mL for both the ZH501 and SA51 wild-type strains and 2.5 ng/mL for the MP-12 vaccine strain. The research underscores the potential of these mAbs in both prophylactic and therapeutic settings, offering a promising avenue for combating RVFV infections. The findings suggest that RVFV-436, along with other mAbs, could be further developed for use in humans to prevent or treat RVFV, which poses a significant threat to both human and animal health³.

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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