

12-8247: Anti-Rift Valley Fever Virus, Glycoprotein (Gn) (Clone RVFV-296)-Purified No Carrier Protein

Clonality : Monoclonal
Clone Name : RVFV-296
Application : ELISA
Isotype : Human IgG1

Description

Specificity: Clone RVFV-296 binds the Gn glycoprotein of Rift Valley Fever Virus (RVFV).

Antigen Distribution: Rift Valley Fever Virus (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-296 is one of the monoclonal antibodies (mAbs) isolated from individuals who were vaccinated with the MP-12 vaccine. It targets the Gn protein of the Rift Valley fever virus (RVFV). However, it has a relatively low neutralizing capacity compared to other mAbs, with an IC₅₀ value of 120 ng/mL for both wild-type strains (ZH501 and SA51) and 638 ng/mL for the MP-12 vaccine strain. This indicates that RVFV-296 is less effective at neutralizing the virus compared to more potent antibodies like RVFV-2683.

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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