

Ross River Virus Antibody

Purified No Carrier Protein

Recombinant Monoclonal Antibody

Product Information

Product No.: LT572

Clone: RRV-19

Isotype: Human IgG1

Storage: Sterile 2-8°C

Product Description

Specificity:

RRV-19 activity is directed against the B domain of the E2 protein and was determined by alanine scanning mutagenesis using cell-surface expression of RRV proteins and flow cytometric screening were used to identify critical binding residues in the E2 glycoprotein. Loss of binding occurs when residue 221 on the B domain of the E2 protein is mutated. Furthermore, clone RRV-19 is capable of neutralizing virus in both pre- and post-attachment neutralization assays.

Antigen Distribution:

Ross River Virus E2 is expressed on the surface of RRV.

Background:

Ross River Virus (RRV) is a mosquito-borne, positive sense, single-stranded virus endemic to Australia and Papua New Guinea that belongs to the arthritogenic group of alphaviruses¹. The mature glycoprotein is composed of E1 and E2 envelope proteins in a heterodimer, expressed as a trimeric spike on the virus surface².

RRV-19 is of the IgG1 isotype and is capable of binding and neutralizing prototype strain RRV T48 as well as clinical isolate strains PW7, SN11, PW14, 2897601, and O'Regan in focus reduction neutralization tests¹.

Known Reactivity Species:

Ross River, Virus

Expression Host:

HEK-293 Cells

Format:

Purified No Carrier Protein

Immunogen:

A panel of human mAbs were sequenced, including RRV-19, was generated from the peripheral blood mononuclear cells of two donors who were naturally infected with RRV¹.

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.

Purity

≥90% monomer by analytical SEC and SDS-Page

Storage and Stability

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.

Product 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.

Other Applications Reported in Literature:

ELISA

N

Country of Origin

USA

References

1. Powell LA, Fox JM, Kose N, et al. PLoS Pathog. 16(5):e1008517. 2020.
2. Snyder AJ, Mukhopadhyay S. J Virol. 86(24):13609-20. 2012.