

Chikungunya Virus Antibody

Recombinant *in vivo* Functional Grade

Recombinant Monoclonal Antibody

Product Information

Product No.: LT568

Clone: CHKV-24

Isotype: Human IgG1

Storage: Sterile 2° to 8°C

Product Description

Specificity:

CHKV-24 targets the CHIKV E2 glycoprotein.

Antigen Distribution:

E2 glycoprotein is expressed on the surface of CHIKV.

Background:

Chikungunya virus (CHIKV) is a mosquito-transmitted alphavirus that causes epidemics globally and has been declared a notable disease by the CDC^{1,2}. Symptoms include high fever, myalgia, rash, and severe polyarthrititis which can persist for long after acute infection. CHIKV is an enveloped virus with an 11.8-kb single-stranded, positive-sense RNA genome with two open reading frames^{3,4}. There are three main genotypes, having 95.2 to 99.8% amino acid identity: Asian, West African, and East/Central/South African (ECSA). The mature CHIKV virion is comprised of a nucleocapsid protein C and two glycoproteins, E1 and E2⁵. E1 participates in virus fusion. E2 functions in attachment to cells. E1 and E2 form 80 trimeric spikes on the virus surface⁶.

Co-circulation of CHIKV with other arboviruses, such as dengue, Zika, Mayaro, and yellow fever, occurs in many countries, posing significant difficulties for diagnosis². Monoclonal antibodies (MAb) can be used both for diagnosis⁷ and as a therapeutic agent^{5,8,9}. CHIKV can be rapidly detected by an immunochromatographic assay using MAbs against the CHIKV envelope protein⁷.

Known Reactivity Species:

Chikungunya, Virus

Expression Host:

HEK-293 Cells

Format:

Purified No Carrier Protein

Immunogen:

B cells of a survivor of natural CHIKV infection

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

≥95% monomer by analytical SEC

Endotoxin

< 1.0 EU/mg as determined by the LAL method

Storage and Stability

Functional grade preclinical antibodies may be stored sterile as received at 2° to 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

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