THE NativeAntigen COMPANY

Building B, Langford Locks
Kidlington
Oxford
Oxfordshire , OX5 1LH
United Kingdom
Tel: +44 (0)1865 595230

Antibody Datasheet / Certificate of Analysis

Product Name:	Mouse anti-Chikungunya virus E2 protein
Clone number:	16A12
Isotype:	Mouse IgG1
Product code:	MAB12129-200
Batch Number:	18072609
Immunogen:	Inactivated native Chikungunya virus, strain 181/25
Amount:	200ug
Concentration:	1mg/ml
Buffer:	Phosphate Buffered Saline pH7.4
Preservative:	None present
Purification:	Antibody was purified by affinity chromatography on Protein A
Specificity:	This antibody is specific for the E2 protein of Chikungunya virus. It demonstrates negligible cross-reactivity with other members of the alphavirus family, including Western Eastern and Venezuelan Encephalitis viruses. There is no cross-reactivity to Zika, Dengue or other flavivirus antigens. The antibody has been reported to neutralise Chikungunya virus in PRNT assays.

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Applications: ELISA, Immunofluorescence, Neutralisation

Antigen background: Chikungunya virus is the aetiological agent of chikungunya fever. CHIKV belongs to the *Alphavirus* genus, and is an enveloped, single-stranded positive-sense RNA virus (Strauss & Strauss, 1994). The alphavirus genome encodes four non-structural proteins (nsP1 to nsP4) and five structural proteins (capsid, E3, E2, 6K and E1).

CHIKV is transmitted to humans by *Aedes* mosquitoes, and disease is characterized by a rapid onset of fever, myalgia and often a rash (usually maculopapular), with chronic disease characterized by episodic, and often debilitating, polyarthralgia/polyarthritis. (Suhrbier *et al.*, 2012). The largest epidemic of CHIKV disease ever reported began in 2004 and has since been responsible for up to 6.5 million human cases, primarily in Africa and Asia, with imported cases reported in over 40 countries. CHIKV infection is symptomatically similar to infection with Zika virus and Dengue virus, and differential diagnosis using immunoassay based testing is important in patient management.

E2, the receptor binding protein, contains residues critical for immunogenicity, host range, and tissue/cell tropism (Voss et al, 2010). The E2 protein consists of three domains (A, B, and C), of which A and B have been found to contain the majority of residues that affect cell attachment and or tissue/cell tropism

Storage: Store at +4^{0}C for up to three months, or at -20^{0}C for longer periods
The antibody is shipped at ambient temperature.
Avoid repeated freeze/thaw cycles.