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Antibody Datasheet

Name: Mouse Anti-West Nile Virus NS1 Antibody (IC12)

Product Code: MAB12160-100

Batch #: 18050912

Date of Manufacture: 09-MAY-2018

Product Description: Mouse monoclonal antibody specific for West Nilevirus NS1 (clone IC12)

Clone Number: IC12.E7.G9/01

Isotype: IgG1

Amount: 0.1 mg

Concentration: 1.0 mg/ml

Purity: >95%

Presentation: Liquid

Buffer: PBS pH7.4

Preservative: None present

Immunogen: Recombinant West Nile virus NS1, from the Native Antigen Company

Purification: The antibody was purified by affinity chromatography on protein G

Specificity: This antibody is specific for the NS1 protein of West Nile virus, and does not cross-react with NS1 from other flaviviruses, including Dengue virus serotypes 1-4, Zika virus, Yellow Fever virus and Japanese Encephalitis virus.

Cross-Reactivity: No cross-reactivity is seen with Chikungunya virus E1, E2 or C proteins.

Applications: Direct ELISA (NS1 antigen bound to plate)

Usage Guidelines

Short Term Storage: +4ºC

Long Term Storage: -20ºC

Storage Guidelines: Avoid repeated freeze/thaw cycles.

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Antigen background: The NS1 protein is a major non-structural protein expressed by the West Nile Virus. The NS1 monomer is a glycosylated protein of approximately 45kD, which associates with lipids and forms a homodimer inside infected cells. It Is necessary for viral replication, and is also secreted into the extracellular space as a hexameric lipoprotein particle, which is involved in immune evasion and pathogenesis by interacting with components from both the innate and adaptive immune systems, as well as other host factors.

West Nile Virus (WNV) is an enveloped, single-stranded RNA virus that belongs to the genus Flavivirus. It is a member of the Japanese encephalitis sero-complex of the family Flaviviridae, which also includes Japanese encephalitis virus, St. Louis encephalitis and Murray Valley encephalitis virus. In nature, West Nile virus is maintained in a cycle between birds and mosquitoes. However, WNV can also be transmitted to incidental hosts such as humans, horses and other mammals by mosquito vectors.

Since the first human WNV infection was identified in 1937 the virus has continued to spread. West Nile virus is now found in many regions of the world including Africa, Europe, West Asia, North and South America. WNV infection is asymptomatic in 80% of cases but some individuals develop severe West Nile fever. The symptoms of West Nile fever include fever, headache, nausea and vomiting. The virus has also been associated with neurological complications and fatalities in less than 1% of infected individuals.

Currently, there is no licensed prophylactic vaccine or specific therapeutic treatment for West Nile virus infection in humans. Prevention of WNV infection is through vector control measures and the use of protective clothing to reduce human-to-human transmission.

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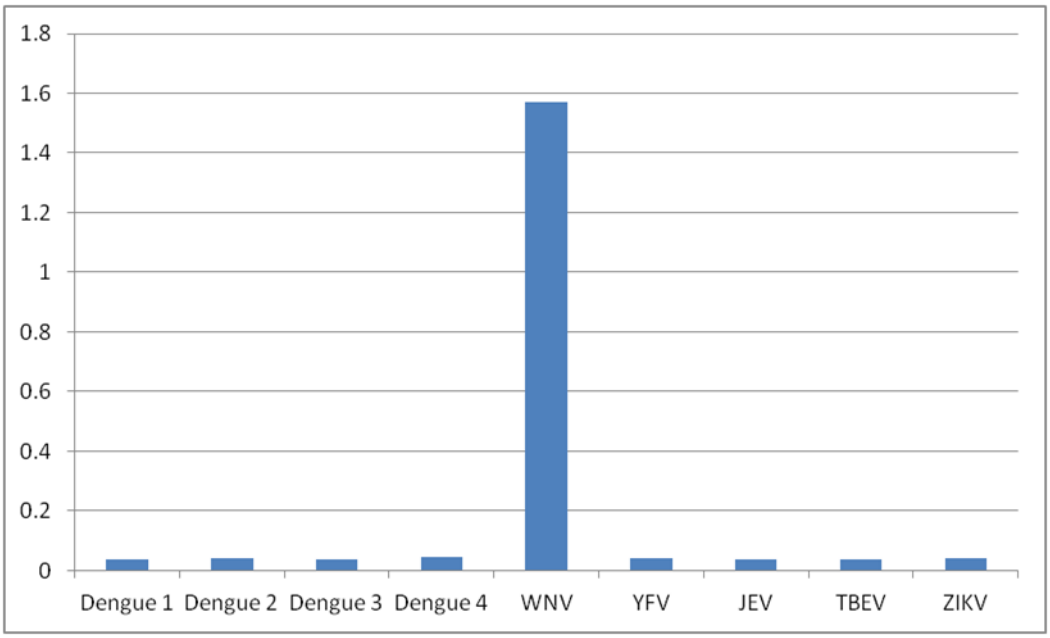
Results: ELISA assay was performed using the method below, with antigens at 0.5ug/ml and antibody at 0.01ug/ml.

ELISA plates coated on bench overnight in DPBS 100ul/well, washed once in wash buffer 300ul/well (TBS + 0.1% tween 20) and blocked 2 hours in 1% BSA in D-PBS 300ul/well. Antibodies diluted to working strength in diluent (DPBS + 1% BSA + 0.05% Tween 20 + 0.2% Proclin 950). Added at 100ul/well and incubated 2 hours shaken at ambient temperature. Washed 3 x 300ul/well.

Goat anti Mouse IgG-HRP (Biorad103005) diluted 1 in 2500 in diluent, added at 100ul/well and incubated with shaking 1 hour at ambient. Plate washed 6X300ul/well. TMB (KPL Sureblue 5120-0077) added at 100ul/well. Reaction for screening assay stopped by addition of 1M HCl 100ul/well.



08/06/2022

X

QC
Signed by: Michael Neale

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QA
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