

Antibody Datasheet

Product Name:	Mouse anti-Yellow Fever Virus NS1
Clone number:	HH7.B.D10.B8
Isotype:	Mouse IgG1
Product code:	MAB12157-100
Batch Number:	18050916
Immunogen:	Recombinant Yellow Fever virus NS1, from the Native Antigen Company
Amount:	100ug
Concentration:	2.4mg/ml
Buffer:	Phosphate Buffered Saline pH7.4
Preservative:	None present
Purification:	Antibody was purified by affinity chromatography on Protein G
Specificity:	<p>This antibody is specific for the NS1 protein of Yellow Fever virus, and does not cross-react with NS1 from other flaviviruses, including Dengue virus serotypes 1-4, Zika virus, West Nile virus and Japanese Encephalitis virus.</p> <p>No cross-reactivity is seen with Chikungunya virus E1, E2 or C proteins.</p>
Applications:	Direct ELISA (NS1 antigen bound to plate)

Antigen background: The NS1 protein is a major non-structural protein expressed by the Yellow Fever 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.

Yellow fever is an acute hemorrhagic disease caused by the yellow fever virus (YFV), which is a member of the Flaviviridae family of viruses. Clinical symptoms of the disease include fever, muscle pain, nausea and vomiting. In a small percentage of patients, the liver and kidneys are affected leading to jaundice, and in some cases death.

In the sylvatic cycle, the virus is transmitted to non-human primates via mosquitoes of the *Haemagogus* and *Sabethes* genera. Whereas the *Aedes aegypti* mosquito is responsible for the transmission of YFV to humans in urban areas. Yellow fever virus is endemic in tropical areas of Africa and Central/South America where the vector is widespread.

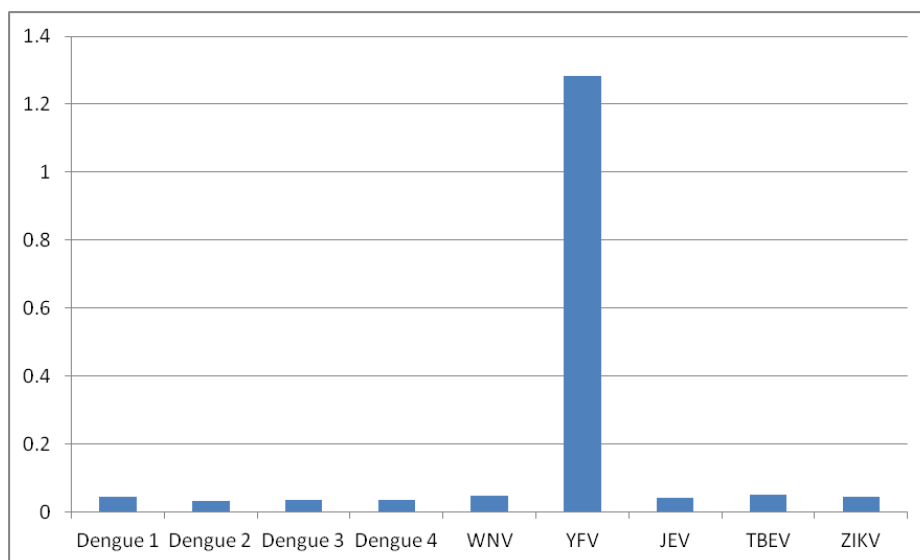
In the late 1930's a safe and effective attenuated vaccine was developed against the YFV, which confers long-term immunity. Since its introduction, the vaccine has been used successfully to immunize individuals in areas where YFV is endemic.

Diagnosis of yellow fever is complicated by the fact that early symptoms of the infection can be confused with other haemorrhagic diseases including Dengue. Differential diagnosis is therefore an important consideration in areas where other flaviviruses such as Dengue and Zika co-circulate.

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.



Storage: Store at +4⁰C for up to three months, or at -20⁰C for longer periods
The antibody is shipped at ambient temperature.
Avoid repeated freeze/thaw cycles.