Technical Data Sheet

InVivoMAb anti-West Nile virus NS1

Attention: Use of this product constitutes an agreement to Bio X Cell's Terms and Conditions which are included with this product in print and can also be found at https://bioxcell.com/terms-and-conditions.

Lot Specific Information

Lot Number: **Lot Specific***
Volume: **Lot Specific***
Concentration: **Lot Specific* (generally 4 to 11 mg/ml) ***
Total Protein: **Lot Specific***

*This information will be noted on the certificate of analysis that ships with this product.

Product Information

Catalog Number:	**BE0427**
Clone:	**10NS1**
Isotype:	Mouse IgG2a, κ
Recommended Isotype Control(s):	InVivoMAb mouse IgG2a isotype control, unknown specificity
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Immunogen:	Recombinant WNV NS1 protein from insect cells
Reported Applications:	*in vivo* protection against WNV infection *in vitro* opsonization of WNV infected cells ELISA Flow cytometry Immunoprecipitation Western blot
Formulation:	PBS, pH 7.0 Contains no stabilizers or preservatives
Endotoxin:	≤1EU/mg (≤0.001EU/μg) Determined by LAL gel clotting assay
Purity:	≥95% Determined by SDS-PAGE
Sterility:	0.2 μm filtration
Production:	Purified from cell culture supernatant in an animal-free facility
Purification:	Protein G
RRID:	
Molecular Weight:	150 kDa

Description

The 10NS1 monoclonal antibody reacts with non-structural protein 1 (NS1) of West Nile virus (WNV), a member of the Flavivirus genus which includes dengue (DEN), yellow fever (YF), Japanese encephalitis (JE), tick-borne encephalitis (TBE), and Zika viruses (ZIK) also. These insect- or tick-transmitted viruses are important human pathogens, and their infection can cause severe disease state or fatal disease. WNV is a single-stranded, positive-sense-enveloped RNA virus that is maintained in nature through a mosquito-bird-mosquito transmission cycle, and its outbreaks have called for aggressive research efforts on developing WNV vaccines. A single polyprotein encoded by the 10.7-kilobase genome of WNV gets cleaved into three structural proteins (C, prM/M, and E) and seven nonstructural (NS) proteins, namely NS1, NS2A, NS2B, NS3, NS4A, NS4B, and NS5. Unlike the other NS proteins, NS1 is secreted and its high levels in serum correlate with the development of severe disease outcome. NS1 is a highly conserved protein, and it is suggested to function as a cofactor in viral RNA replication. NS1 directed antibodies have been shown to offer significant protection against flaviviral infections in vivo. Moreover, mechanistic experimental studies have established that in vivo administration of 10NS1 monoclonal antibody protects mice against WNV infection through Fc-γ receptor I- and/or IV-dependent mechanisms.

Storage

Store at the stock concentration at 4°C . **Do not freeze.**
It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at https://bioxcell.com/faqs.

Protocol Information

Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bioxcell.com/be0427?bxcs=9k1b3a#tab_references or scan the QR code below.

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