Technical Data Sheet

InVivoMAb anti-WNV E protein DIII-LR

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:	**BE0429**
Clone:	**E16**
Isotype:	Mouse IgG2b, κ
Recommended Isotype Control(s):	InVivoMAb mouse IgG2b isotype control, unknown specificity
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Immunogen:	Recombinant WNV E protein
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 A
RRID:	
Molecular Weight:	150 kDa

Description

The E16 monoclonal antibody reacts with the domain III lateral ridge (DIII-LR) of the envelope (E) protein of West Nile Virus (WNV). The positive-stranded RNA virus WNV affects birds, horses, and humans, and its clinical presentation ranges from asymptomatic (~80% cases) to encephalitis/paralysis, and some infections can be fatal. Because of a lack of FDA-licensed vaccines for human use, extensive research is going on in this research area and several monoclonal antibodies have been invented to facilitate WNV related experiments. Among various potent WNV antibody clones, the E16 monoclonal antibody is known to neutralize multiple strains of WNV in vitro, and its in vivo administration to WNV infected mice has offered experimental therapeutic efficacy. Moreover, in post-exposure therapeutic experiments in mice, the humanized version of E16 monoclonal antibody was shown to protect the animals against WNV infection-induced mortality. Notably, this antibody is less potent in mice that lack Fc gamma receptors. E16 monoclonal antibody inhibits infection of genetically diverse WNV lineage I strains isolated from mosquitoes, birds and horses in NY (USA) and the original lineage II strain 956 which was isolated in 1937. This antibody does not recognize or neutralize other flaviviruses including dengue virus (DENV), yellow fever viruses (YFV), or Japanese encephalitis virus (JEV) and St. Louis' encephalitis virus.

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/be0429?bxcs=9k1b3a#tab_references or scan the QR code below.

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