Envelope Domain III (EDIII) Protein from Powassan Virus, LB with C-Terminal Histidine Tag, Recombinant from Yeast

Catalog No. NR-52391

For research use only. Not for use in humans.

Contributor and Manufacturer:
BEI Resources

Product Description:
A recombinant form of the truncated Envelope Domain III (EDIII) protein of the Powassan virus (POWV), LB (GenPept: NP_775516) was produced by the *Komagataella phaffii (Pichia pastoris)* expression system and purified using nickel affinity chromatography.[1] NR-52391 contains residues 301 to 401 of the EDIII protein and features a thrombin cleavage site and C-terminal octa-histidine tag. The predicted protein sequence is shown in Figure 1. NR-52391 has a theoretical molecular weight of 12,763 daltons.

Material Provided:
Each vial contains approximately 50 µL of purified recombinant EDIII protein in PBS (pH 7.4). The concentration, expressed as mg per mL, is shown on the Certificate of Analysis.

Packaging/Storage:
NR-52391 was packaged aseptically, in screw-capped plastic cryovials. This product is provided on ice bricks and should be stored at -20°C or colder immediately upon arrival. Repeated freeze-thaw cycles of this product should be avoided.

Functional Activity:
NR-52391 reacts with monoclonal anti-histidine tag in western blot analysis.

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Envelope Domain III (EDIII) Protein from Powassan Virus, LB with C-Terminal Histidine Tag, Recombinant from Yeast, NR-52391."

Biosafety Level: 1
Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

Disclaimers:
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References:
1. Mandl, C. W., et al. "Complete Genomic Sequence of Powassan Virus: Evaluation of Genetic Elements in Tick-Borne *versus* Mosquito-Borne Flaviviruses." Virology 194 (1993): 173-184. PubMed: 8097605.

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Figure 1 – Predicted Protein Sequence

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  1  MGTTYSMCDK AKFKWKRVPV DSGHDTVVME VSYTGSDKPC RIPVRAVAHG
 51  VPAVNVAMLI TPNPTIETNG GGFIEMQLPP GDNIIYVGDL SQQWFQKGST
101  IGLVPRGSHH HHHHHH
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Vector-derived amino acids – Residue 1
EDIII – **Residues 2 to 102**
Thrombin cleavage site – Residues 103 to 108
Octa-histidine tag – Residues 109 to 116

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