Total RNA from Adult Male *Brugia malayi*, Strain FR3

Catalog No. NR-42497

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For research use only. Not for human use.

Contributor:

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Manufacturer:

Filariasis Research Reagent Resource Center supported by Contract HHSN272201000030I, NIH-NIAID Animal Models of Infectious Disease Program

Product Description:

NR-42497 is a preparation of total RNA extracted from adult male *Brugia malayi* (*B. malayi*), strain FR3. *B. malayi*, strain FR3 was originally obtained from researchers in Malaysia by Dr. John Schacher.[1,2]

B. malayi is a mosquito-borne filarial nematode worm that causes lymphatic filariasis.[3] Mosquitoes deposit infective third stage larvae (L3) on human skin. The larvae then penetrate and migrate to the lymphatic vessels where they develop into adult worms over several months. Development includes molting transitions into fourth stage larvae (L4) and fifth stage larvae (L5) to reach maturation. The matured female worms release large numbers of microfilariae into the host bloodstream. The microfilariae are ingested by a mosquito during a blood meal and penetrate the midgut and develop over a period of 10 to 14 days to L3. L3 are developmentally arrested in the mosquito. The process repeats when the mosquito's proboscis penetrates human skin.[4]

Material Provided:

Each vial of NR-42497 contains approximately 1 µg of DNase-treated RNA in TE buffer (1 mM Tris-HCl, 0.1 mM EDTA, pH ~ 8). The concentration is shown on the Certificate of Analysis. The vial should be centrifuged prior to opening.

Packaging/Storage:

NR-42497 was packaged in RNase/DNase-free plastic vials. The product is provided frozen and should be stored at -80°C or colder upon arrival. Freeze-thaw cycles should be minimized.

Citation:

Acknowledgment for publications should read "The following reagent was provided by the NIH/NIAID Filariasis Research Reagent Resource Center for distribution by BEI Resources, NIAID, NIH: Total RNA from Adult Male *Brugia malayi*, Strain FR3, NR-42497."

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. Ash, L. R. and J. M. Riley. "Development of Subperiodic *Brugia malayi* in the Jird, *Meriones unguiculatus*, with Notes on Infections in Other Rodents." J. Parasitol. 56 (1970): 969-973. PubMed: 5504534.

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2. Michalski, M. L., et al. "The NIH-NIAID Filariasis Research Reagent Resource Center." PLoS Negl. Trop. Dis. 5 (2011): e1261. PubMed: 22140585.
3. Simonsen, P. E. and M. E. Mwakitalu. "Urban Lymphatic Filariasis." Parasitol. Res. 112 (2013): 35-44. PubMed: 23239094.
4. Li, B. W., et al. "Transcription Profiling Reveals Stage- and Function-Dependent Expression Patterns in the Filarial Nematode *Brugia malayi*." BMC Genomics 13 (2012): 184. PubMed: 22583769.

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