Brugia pahangi Microfilariae from the Peritoneal Cavity of a Mongolian Gerbil (Frozen)

Catalog No. NR-48898

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Contributor:

Andrew R. Moorhead, D.V.M., M.S., Ph.D., Director and Principal Investigator, Filariasis Research Reagent Resource Center, Department of Infectious Diseases University of Georgia College of Veterinary Medicine, Athens, Georgia, USA

Manufacturer:

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

Product Description:

Classification: *Onchocercidae*, *Brugia*
Species: *Brugia pahangi*
Strain: FR3
Original Source: *Brugia pahangi* (*B. pahangi*), strain FR3 was originally obtained from researchers in Malaysia by Dr. John Schacher.[1,2]

B. pahangi is a thread-like filarial nematode with a life cycle consisting of a mosquito intermediate host and a wide variety of carnivorous definitive hosts including human and felines.[1,3] Mosquitos 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 juvenile adults 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.[4,5] L3 are developmentally arrested in the mosquito. The process repeats when the mosquito's proboscis penetrates the definitive host's skin.[4]

Material Provided:

NR-48898 consists of up to 4 million *B. pahangi* microfilariae. If more material is required for your intended use, please contact BEI Customer Services at contact@beiresources.org, to request the additional material.

Packaging/Storage:

NR-48898 was packaged in 1.5 mL centrifuge tubes. The product is provided on dry ice and should be stored at -20°C or colder immediately upon arrival.

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: *Brugia pahangi* Microfilariae from the Peritoneal Cavity of a Mongolian Gerbil (Frozen), NR-48898."

Biosafety Level: 2

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.

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References:

1. Schacher, J. F. "Morphology of the Microfilaria of *Brugia pahangi* and of the Larval Stages of the Mosquito." J. Parasitol. 48 (1962): 679-692. PubMed: 13976565.
2. Michalski, M. L., et al. "The NIH-NIAID Filariasis Research Reagent Resource Center." PLoS Negl. Trop. Dis. 5 (2011): e1261. PubMed: 22140585.
3. Schacher, J. F. "Developmental Stages of *Brugia pahangi* in the Final Host." J. Parasitol. 48 (1962): 693-706. PubMed: 13976564.
4. Simonsen, P. E. and M. E. Mwakitalu. "Urban Lymphatic Filariasis." Parasitol. Res. 112 (2013): 35-44. PubMed: 23239094.
5. 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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