

**Adult Female *Ornithodoros tartakovskyi*,
Infected with *Acanthocheilonema viteae*
(Live)**

Catalog No. NR-48933

This reagent is the tangible property of the U.S. Government.

For research use only. Not for human use.

Contributor:

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Manufacturer:

Filariasis Research Reagent Resource Center supported by Contract HHSN272201000301, NIH-NIAID Animal Models of Infectious Disease Program¹

Product Description:

Classification: Argasidae, *Ornithodoros*

Species: *Ornithodoros tartakovskyi* (also referred to as *Ornithodoros tartakowskyi*)

Strain: FR3

Original Source: *Ornithodoros tartakovskyi* (*O. tartakovskyi*), strain FR3, was obtained from TRS Laboratories in Athens, Georgia, USA.²

Comment: *O. tartakovskyi* is used to maintain the life cycle of *Acanthocheilonema viteae* (*A. viteae*) at University of Wisconsin Oshkosh for the Filariasis Research Reagent Resource Center.²

O. tartakovskyi is a soft tick whose natural distribution includes central Asia, the former USSR and Iran. It usually resides in the burrows of rodents and tortoises, but it is also capable of feeding from humans. *O. tartakovskyi* vectors the filarial nematode *A. viteae*, as well as *Borrelia latyschewii* (a bacterial agent of tick-borne relapsing fever) and the Karshi and Langat viruses.^{3,4}

Material Provided:

NR-48933 consists of up to 15 live adult female *O. tartakovskyi*, infected with *A. viteae*. Actual numbers available for immediate shipment will be based on current inventory. 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-48933 is packaged in 7 or 9 dram plastic vials. These primary vials are secured inside a larger plastic secondary container, which is shipped in an insulated box inside a fiberboard box. This shipment is in accordance with the Arthropod Containment Guidelines Version 3.1 (The

American Committee of Medical Entomology of the American Society of Tropical Medicine and Hygiene). All live *O. tartakovskyi* orders are shipped overnight from University of Wisconsin Oshkosh, Oshkosh, Wisconsin, USA.

O. tartakovskyi should be housed in insect chambers set to 27°C and 80% humidity. All life stages of this tick feed quickly, and the life cycle can be maintained on artificial membrane feeding systems using rabbit blood (Hemostat Laboratories, Dixon, California, USA) instead of living hosts.

A video outlining the general process of maintaining and feeding *O. tartakovskyi* can be found at <https://www.youtube.com/watch?v=u1vMGlaRuAM>.

Questions regarding handling of *O. tartakovskyi* can be sent to Dr. Shelly Michalski at michalsk@uwosh.edu.

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: Adult Female *Ornithodoros tartakovskyi*, Infected with *Acanthocheilonema viteae* (Live), NR-48933."

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/bmb15/index.htm.

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References:

1. Michalski, M. L., et al. "The NIH-NIAID Filariasis Research Reagent Resource Center." PLoS Negl. Trop. Dis. 5 (2011): e1261. PubMed: 22140585.
2. Michalski, M. L., Personal Communication.
3. Manzano-Román, R., et al. "Soft Ticks as Pathogen Vectors: Distribution, Surveillance and Control." Parasitology. Ed. M. M. Shah. Croatia, Rijeka: InTech, 2012. 125-162.
4. Parola, P. and D. Raoult. "Ticks and Tickborne Bacterial Disease in Humans: An Emerging Infection Threat." Clin. Infect. Dis. 32 (2001): 897-928. PubMed: 11247714.

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