

Ixodes scapularis Nymph

Catalog No. NR-44116

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

For research use only. Not for use in humans.

Contributor:

Michael L. Levin, Ph.D., Medical Entomology Lab Director, Rickettsial Zoonoses Branch, Centers for Disease Control and Prevention (CDC), Atlanta, Georgia, USA

Manufacturer:

CDC, Atlanta, Georgia, USA

Product Description:

Classification: *Ixodidae*, *Ixodes*

Species: *Ixodes scapularis* (common name: blacklegged tick or deer tick)

Original Source: *Ixodes scapularis* (*I. scapularis*) ticks were flagged from vegetation in 2003 in Rhode Island, USA.

Transmission Competent Pathogens: *Anaplasma phagocytophilum*, *Babesia* spp., *Borrelia burgdorferi*, *Ehrlichia muris*-like agent, Powassan virus

Comment: The whole genome shotgun sequence of a representative *I. scapularis* colony is available (GenBank: [ABJB000000000](https://www.ncbi.nlm.nih.gov/nuccore/ABJB000000000)).¹

Material Provided:

NR-44116 contains a live, wild-type *I. scapularis* nymph.

Note: *I. scapularis* can also be obtained in adult (NR-42510) or larval forms (NR-44115).

Packaging/Storage:

NR-44116 is prepared and shipped by CDC. The product is provided at room temperature and should be placed in an incubator or used immediately.

Growth Conditions:

All life stages are fed on New Zealand White rabbits. The contributor recommends standardized laboratory conditions for the maintenance of ticks.²

Citation:

Acknowledgment for publications should read "The following reagent was provided by Centers for Disease Control and Prevention for distribution by BEI Resources, NIAID, NIH: *Ixodes scapularis* Nymph, NR-44116."

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. 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

Disclaimers:

You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:

This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

References:

1. Ayllón, N., et al. "Systems Biology of Tissue-Specific Response to *Anaplasma phagocytophilum* Reveals Differentiated Apoptosis in the Tick Vector *Ixodes scapularis*." *PLoS Genet.* 11 (2015): e1005120. PubMed: 25815810.
2. Troughton, D. R. and M. L. Levin. "Life Cycles of Seven Ixodid Tick Species (Acari: *Ixodidae*) Under Standardized Laboratory Conditions." *J. Med. Entomol.* 44 (2007): 732-740. PubMed: 17915502.

ATCC® is a trademark of the American Type Culture Collection.

