

**Plasmid Containing 18S Ribosomal RNA Gene Fragment from *Cyclospora cayetanensis***

**Catalog No. NR-51498**

**For research use only. Not for use in humans.**

**Contributor:**

Michael Arrowood, Ph.D., Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases, Division of Foodborne, Waterborne and Environmental Diseases, Waterborne Disease Prevention Branch, Atlanta, Georgia, USA

**Manufacturer:**

BEI Resources

**Product Description:**

An approximately 1000 base pair fragment of the small subunit ribosomal RNA gene (18S rRNA gene) from *Cyclospora cayetanensis* (*C. cayetanensis*) was amplified by nested PCR and cloned into vector pCR™2.1-TOPO™ (Invitrogen™).<sup>1,2</sup> NR-51498 may be used in the development of diagnostic assays for the detection of *C. cayetanensis*.<sup>2</sup> The size of the plasmid is approximately 5000 base pairs and contains the gene required for ampicillin. NR-51498 was produced in *Escherichia coli* (*E. coli*) and extracted.

**Material Provided:**

Each vial contains 0.2 µg to 3.5 µg of plasmid DNA in buffer. The concentration is shown on the Certificate of Analysis. The vial should be centrifuged prior to opening.

**Packaging/Storage:**

NR-51498 was packaged aseptically in screw-capped cryovials. The product is provided frozen on dry ice and should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be minimized.

**Citation:**

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Plasmid Containing 18S Ribosomal RNA Gene Fragment from *Cyclospora cayetanensis*, NR-51498.”

**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](http://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](http://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. This material may be subject to third party patent rights.

**References:**

1. Arrowood, M., Personal Communication.
2. Murphy, H. R., S. Lee and A. J. da Silva. “Evaluation of an Improved U.S. Food and Drug Administration Method for the Detection of *Cyclospora cayetanensis* in Produce Using Real-Time PCR.” [J. Food. Prot.](#) 80 (2017): 1133-1144. PubMed: 28590822.

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

