

Certificate of Analysis for NR-41336

Biomphalaria glabrata, 28S Ribosomal RNA Gene Forward Primer

Catalog No. NR-41336

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

Product Description: NR-41336 contains a twenty nucleotide forward primer designed to amplify the 28S ribosomal RNA gene from *Biomphalaria glabrata* (*B. glabrata*) when paired with the 28S ribosomal RNA reverse primer (NR-41372). The sequence of the 28S ribosomal RNA forward 20-mer is 5'-TCGCCGCGTGCACTTTCCAT-3'.

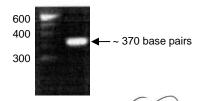
Lot¹: 61433129 Manufacturing Date: 17MAY2012

TEST	SPECIFICATIONS	RESULTS
PCR Assay of Extracted Nucleic Acid ^{2,3}		
Biomphalaria glabrata	~ 370 base pair amplicon	~ 370 base pair amplicon (Figure 1)
Schistosoma mansoni	No amplicons	No amplicons
Primer Characteristics ¹		
Molecular weight	Report results	6020 g/mol
Primer melting temperature (Tm)	Report results	64.5°C
GC content	Report results	60.0%
Primer concentration	Report results	100 μM
Moles of primer	Report results	3.0 nmoles per vial
Micrograms of primer	Report results	18.1 µg per vial
Gene Stability by Quantitative Real-Time PCR	Report results	No statistical significant difference in threshold cycle (Ct) ^{4,5}

¹NR-41336 lot: 61433129 was manufactured by Eurofins MWG Operon. Primer characteristics were determined by the manufacturer. The bulk material was thawed and aliquoted at ATCC[®].

www.beiresources.org

Figure 1: PCR Amplification of *B. glabrata* 28S Ribosomal RNA using NR-41336 and NR-41372



Date: 29 AUG 2013 Signature:

Title: Technical Manager, BEI Authentication or designee

ATCC[®], on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected by the contributor and manufacturer to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC[®]'s knowledge.

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

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

BEI Resources E-mail: contact@beiresources.org

Tel: 800-359-7370 Fax: 703-365-2898

²PCR completed by the Biomedical Research Institute prior to vialing.

³Position 464 to 832 of GenBank: AF435694.1

⁴20 individual snails were utilized for RT-PCR amplification

⁵ANOVA test (P value = 0.01)