

## **Certificate of Analysis for NR-41335**

## Biomphalaria glabrata, Myoglobin (Mb) Gene Forward Primer

## Catalog No. NR-41335

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

**Product Description:** NR-41335 contains a twenty nucleotide forward primer designed to amplify the myoglobin (Mb) gene from *Biomphalaria glabrata* (*B. glabrata*) when paired with the Mb reverse primer (NR-41371). The sequence of the Mb forward 20-mer is 5'-CAACCAGTCCGACGCCCC-3'.

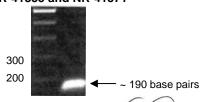
Lot<sup>1</sup>: 61433128 Manufacturing Date: 17MAY2012

TEST	SPECIFICATIONS	RESULTS
PCR Assay of Extracted Nucleic Acid <sup>2,3</sup>		
Biomphalaria glabrata	~ 190 base pair amplicon	~ 190 base pair amplicon (Figure 1)
Schistosoma mansoni	No amplicons	No amplicons
Primer Characteristics <sup>1</sup>		
Molecular weight	Report results	6017 g/mol
Primer melting temperature (Tm)	Report results	68.6°C
GC content	Report results	70.0%
Primer concentration	Report results	100 μΜ
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) <sup>4,5</sup>

<sup>&</sup>lt;sup>1</sup>NR-41335 lot: 61433128 was manufactured by Eurofins MWG Operon. Primer characteristics were determined by the manufacturer. The bulk material was thawed and aliquoted at ATCC<sup>®</sup>.

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Figure 1: PCR Amplification of *B. glabrata* Mb Gene using NR-41335 and NR-41371



Date: 29 AUG 2013 Signature:

**Title:** Technical Manager, BEI Authentication or designee

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<sup>&</sup>lt;sup>2</sup>PCR completed by the Biomedical Research Institute prior to vialing.

<sup>&</sup>lt;sup>3</sup>Position 108 to 296 of GenBank: AY314976

<sup>&</sup>lt;sup>4</sup>20 individual snails were utilized for RT-PCR amplification

<sup>&</sup>lt;sup>5</sup>ANOVA test (P value = 0.01)