SUPPORTING INFECTIOUS DISEASE RESEARCH

## Schistosoma mansoni, Actin Gene Forward Primer

## Catalog No. NR-41322

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

**Product Description:** NR-41322 contains a twenty-one nucleotide forward primer designed to amplify the actin gene from *Schistosoma mansoni* (*S. mansoni*) when paired with the actin reverse primer (NR-41358). The sequence of the actin forward 21-mer is 5'-AAGTGAACATGGCCGACGAGG-3'.

Lot<sup>1</sup>: 61433113

## Manufacturing Date: 17MAY2012

TEST	SPECIFICATIONS	RESULTS
PCR Assay of Extracted Nucleic Acid <sup>2,3,4</sup> Amplicon size	~ 420 base pair amplicon	~ 420 base pair amplicon (Figure 1)
Primer Characteristics <sup>1</sup>		
Molecular weight	Report results	6843 g/mol
Primer melting temperature (Tm)	Report results	64.5°Č
GC content	Report results	54.5%
Primer concentration	Report results	100 µM
Moles of primer	Report results	3.0 nmoles per vial
Micrograms of primer	Report results	20.5 µg per vial
Gene Stability by Quantitative Real-Time PCR	Report results	No statistical significant difference in threshold cycle (Ct) <sup>5,6</sup>

<sup>1</sup>NR-41322 lot: 61433113 was manufactured by Eurofins MWG Operon. Primer characteristics were determined by the manufacturer. The bulk material was thawed and aliquoted at ATCC<sup>®</sup>.

<sup>2</sup>PCR completed by the Biomedical Research Institute prior to vialing at ATCC<sup>®</sup>.

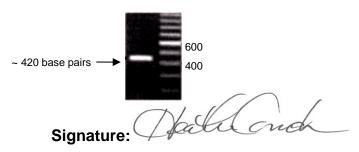
<sup>3</sup>Position 37 to 452 of GenBank: U19945.1

<sup>4</sup>This test showed no cross amplification in mice

<sup>5</sup>20 individual snails were utilized for RT-PCR amplification

<sup>6</sup>ANOVA test (P value = 0.01)

## Figure 1: PCR Amplification of *S. mansoni* Actin Gene using NR-41322 and NR-41358



Date: 16 SEP 2013

Title:

Technical Manager, BEI Authentication or designee

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