

Certificate of Analysis for NR-41359

Schistosoma mansoni, Elongation Factor 1 (EF-1) Gene Reverse Primer

Catalog No. NR-41359

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

Product Description: NR-41359 contains a twenty nucleotide reverse primer designed to amplify the elongation factor 1 (EF-1) gene from Schistosoma mansoni (S. mansoni) when paired with the The sequence of the EF-1 reverse 20-mer is EF-1 forward primer (NR-41323). 5'-CCGTGCCAGCCAGAGATCGG-3'.

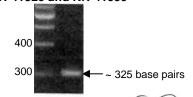
Manufacturing Date: 17MAY2012 Lot¹: 61476756

TEST	SPECIFICATIONS	RESULTS
PCR Amplification and Sequencing ^{2,3,4} Amplicon size	~ 325 base pair amplicon	~ 325 base pair amplicon (Figure 1)
Primer Characteristics ¹		
Molecular weight	Report results	6128 g/mol
Primer melting temperature (Tm)	Report results	68.6°Č
GC content	Report results	70.0%
Primer concentration	Report results	100 µM
Moles of primer	Report results	3.0 nmoles per vial
Micrograms of primer	Report results	18.4 µg per vial
Gene Stability by Quantitative Real-Time PCR	Report results	No statistical significant difference in threshold cycle (Ct) ^{5,6}

¹NR-41359 lot: 61476756 was manufactured by Eurofins MWG Operon. Primer characteristics were determined by the manufacturer. The bulk material was thawed and aliquoted at ATCC®.

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Figure 1: PCR Amplification of S. mansoni EF-1 Gene using NR-41323 and NR-41359



Date: 16 SEP 2013 Signature:

> Title: Technical Manager, BEI Authentication or designee

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

³Position 273 to 594 of GenBank: XM002580751

⁴This test showed no cross amplification in mice ⁵20 individual snails were utilized for RT-PCR amplification

⁶ANOVA test (P value = 0.01)