

**Schistosoma mansoni, Actin Gene Forward Primer**

**Catalog No. NR-41322**

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

**For research use only. Not for human use.**

**Contributor:**

Matthew S. Tucker, Head Schistosomiasis Laboratory and Principle Investigator, Biomedical Research Institute, Rockville, MD (NIH-NIAID Contract HHSN2722010000051)

**Manufacturer:**

Eurofins MWG Operon

**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'. Please see Appendix I for general PCR procedure details.

**Material Provided:**

Each vial contains approximately 30 µL of forward primer in TE buffer (100 mM Tris-HCl, 0.5 M EDTA, pH 7.5). The concentration is shown on the Certificate of Analysis.

**Packaging/Storage:**

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

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Schistosoma mansoni*, Actin Gene Forward Primer, NR-41322."

**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. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; 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.

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



APPENDIX I

*S. mansoni* Actin Gene Primers

Recommended Reagents/Equipment

Reagent	Source	Catalog #
<i>S. mansoni</i> actin gene primers (forward and reverse)	BEI Resources	NR-41322 and NR-41358
Genomic DNA from <i>S. mansoni</i> <sup>1</sup>	BEI Resources	NR-28910 to NR-28912
10X PCR Buffer	No Manufacturer Recommended	N/A
Taq <sup>®</sup> Polymerase	No Manufacturer Recommended	N/A
dNTP Mix	No Manufacturer Recommended	N/A
Molecular Biology Grade Water	No Manufacturer Recommended	N/A

<sup>1</sup>Primers can also be used with other *S. mansoni* nucleic acids.

Reaction Mix<sup>1</sup>

Reagent	Stock Concentration	Volume per Reaction (µL)
Molecular Biology Grade Water	---	16.5
10X PCR Buffer	10X	2.5
dNTP Mix	5 mM each	1
Taq <sup>®</sup> Polymerase	5 Units per µL	1
Forward and Reverse Primers <sup>2</sup>	10 µM (each primer)	1
Template DNA	25 ng per µL	2
		Total – 25 µL

<sup>1</sup>Reaction mix should be kept on bench-top cooler until ready for use.

<sup>2</sup>Primers are supplied at a concentration of 100 µM and need to be diluted to the working stock concentrations.

Cycling Protocol

Cycle	# of Repeats	Step	Conditions
1	1	1	94°C for 15 minutes
2	10	1	94°C for 30 seconds
		2	68°C for 90 seconds (decrease temperature 1°C per cycle)
3	20	1	94°C for 30 seconds
		2	58°C for 90 seconds
4	1	1	72°C for 60 seconds
5	1	1	60°C for 30 minutes