

***Schistosoma mansoni*, Female-Specific W1-3' Primer**

Catalog No. NR-29398

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For research use only. Not for human use.

Contributor:

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Manufacturer:

Eurofins MWG Operon

Product Description:

NR-29398 contains a twenty nucleotide reverse primer designed to amplify the female-specific W1 repeat region from *Schistosoma mansoni* (*S. mansoni*) when paired with the W1-5' forward primer (NR-29396). The sequence of the W1-3' 20-mer is 5'-GAATTCACCACTCGACATTC-3'.^{1,2} Please see Appendix I for general PCR procedure details.

Material Provided:

Each vial contains approximately 30 µL of reverse primer in nuclease-free distilled water. 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. **Note: For long-term storage it is strongly recommended that primers are kept in TE buffer (10 mM Tris, 1 mM EDTA), pH 8.0 at -20°C or colder.**

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Schistosoma mansoni*, Female-Specific W1-3' Primer, NR-29398."

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.

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References:

1. Webster, P., T. E. Mansour and D. Bieber. "Isolation of a Female-Specific, Highly-Repeated *Schistosoma mansoni* DNA Probe and Its Use in an Assay of Cercarial Sex." Mol Biochem Parasitol 36 (1989): 217-222. PubMed: 2797060.
2. Portela, J. et al. "Whole-Genome *in-silico* Subtractive Hybridization (WISH) – using Massive Sequencing for the Identification of Unique and Repetitive Sex-Specific Sequences: the Example of *Schistosoma mansoni*." BMC Genomics 11 (2010): 387. PubMed: 20565937.

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APPENDIX I

S. mansoni Female-Specific Primers

Recommended Reagents/Equipment

Reagent	Source	Catalog #
<i>S. mansoni</i> primers (forward and reverse)	BEI Resources	NR-29396 and NR-29398
Genomic DNA from <i>S. mansoni</i> ¹	BEI Resources	NR-28910 to NR-28912
10X PCR Buffer	No Manufacturer Recommended	N/A
Taq [®] Polymerase	No Manufacturer Recommended	N/A
dNTP Mix	No Manufacturer Recommended	N/A
Molecular Biology Grade Water	No Manufacturer Recommended	N/A

¹Primers can also be used with other *S. mansoni* nucleic acids.

Reaction Mix¹

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 [®] Polymerase	5 Units per µL	1
Forward and Reverse Primers ²	10 µM (each primer)	1
Template DNA	25 ng per µL	2
		Total – 25 µL

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

²Primers 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