

***Schistosoma mansoni*, Microsatellite  
SMD43 Reverse Primer**

**Catalog No. NR-29382**

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

**Contributor:**

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**Manufacturer:**

Eurofins MWG Operon

**Product Description:**

NR-29382 is a twenty nucleotide reverse primer designed to amplify microsatellite SMD43 from *Schistosoma mansoni* (*S. mansoni*) when paired with the SMD43 forward primer (NR-29383). The sequence of the SMD43-R 20-mer is 5'-GGACAAAACGCGGGTCCTCCA-3'.<sup>1,2</sup> 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 provided by the NIAID Schistosomiasis Resource Center for distribution through BEI Resources, NIAID, NIH: *Schistosoma mansoni*, Microsatellite SMD43 Reverse Primer, NR-29382."

**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).

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**References:**

1. Gower, C. M., et al. "Development and Application of an Ethically and Epidemiologically Advantageous Assay for the Multi-Locus Microsatellite Analysis of *Schistosoma mansoni*." Parasitology 134 (2007): 523-536. PubMed: 17096873.
2. Curtis, J., et al. "Microsatellite Loci in the Human Blood Fluke *Schistosoma mansoni* and their Utility for Other Schistosome Species." Mol. Ecol. Notes 1 (2001): 143-145.

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APPENDIX I

*S. mansoni* Microsatellite Primers

Recommended Reagents/Equipment

Reagent	Source	Catalog #
<i>S. mansoni</i> microsatellite primers (forward and reverse)	BEI Resources	NR-29379 to NR-29395
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
		1	60°C for 30 minutes