

***Schistosoma mansoni* Microsatellite
SMD43 Forward Primer**

Catalog No. NR-29383

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For research use only. Not for human use.

Contributor:

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Manufacturer:

Eurofins MWG Operon

Product Description:

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

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. 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> 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