

***Schistosoma mansoni*, Microsatellite
SMD89 Reverse Primer**

Catalog No. NR-29391

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

For research use only. Not for human use.

Contributor:

Matty Knight, Principal Investigator, Biomedical Research Institute, Rockville, MD (NIH-NIAID Contract HHSN2722010000051)

Manufacturer:

Eurofins MWG Operon

Product Description:

NR-29391 contains a twenty nucleotide reverse primer designed to amplify the microsatellite SMD89 from *Schistosoma mansoni* (*S. mansoni*) when paired with the SMD89 forward primer (NR-29390). The sequence of the SMD89-R 20-mer is 5'-CATCATTTGGTTTGTGCGAG-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*, Microsatellite SMD89 Reverse Primer, NR-29391."

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.

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.

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.

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. Durand, P., Sire, C. and A. Theron. "Isolation of Microsatellite Markers in the Digenetic Trematode *Schistosoma mansoni* from Guadeloupe Island." Mol. Ecol. 9 (2000): 997-998. PubMed: 10886664.

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



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 |