

***Biomphalaria glabrata*, Beta-Tubulin Gene Forward Primer**

**Catalog No. NR-41338**

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

**Contributor:**

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**Manufacturer:**

Eurofins MWG Operon

**Product Description:**

NR-41338 contains a twenty nucleotide forward primer designed to amplify the beta-tubulin gene from *Biomphalaria glabrata* (*B. glabrata*) when paired with the beta-tubulin reverse primer (NR-41374). The sequence of the beta-tubulin forward 20-mer is 5'-GGTGGCGGCACTGGATCTGG-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: *Biomphalaria glabrata*, Beta-Tubulin Gene Forward Primer, NR-41338."

**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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APPENDIX I

*B. glabrata* Beta-Tubulin Primers

Recommended Reagents/Equipment

Reagent	Source	Catalog #
<i>B. glabrata</i> beta-tubulin primers (forward and reverse)	BEI Resources	NR-41338 and NR-41374
Genomic DNA from <i>B. glabrata</i> <sup>1</sup>	BEI Resources	NR-29375 to NR-29377
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 *B. glabrata* 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