

***Biomphalaria glabrata*, Glyceraldehyde 3-Phosphate Dehydrogenase (GAPDH) Gene Forward Primer**

Catalog No. NR-41334

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

For research use only. Not for human use.

Contributor:

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Manufacturer:

Eurofins MWG Operon

Product Description:

NR-41334 contains a twenty-one nucleotide forward primer designed to amplify the glyceraldehyde 3-phosphate dehydrogenase (GAPDH) gene from *Biomphalaria glabrata* (*B. glabrata*) when paired with the GAPDH reverse primer (NR-41370). The sequence of the GAPDH forward 21-mer is 5'-CGTGACCCAGGTGCCATCGAC-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*, Glyceraldehyde 3-Phosphate Dehydrogenase (GAPDH) Gene Forward Primer, NR-41334."

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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APPENDIX I

B. glabrata GAPDH Primers

Recommended Reagents/Equipment

Reagent	Source	Catalog #
<i>B. glabrata</i> GAPDH primers (forward and reverse)	BEI Resources	NR-41334 and NR-41370
Genomic DNA from <i>B. glabrata</i> ¹	BEI Resources	NR-29375 to NR-29377
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 *B. glabrata* 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