

Materials List for

Gradient Polymerase Chain Reaction to Determine the Optimum Annealing Temperature

1
?

URL: <https://www.jove.com/video/21353>

DOI: [doi:10.3791/21353](https://doi.org/10.3791/21353)

Materials

Name	Company	Catalog Number	Comments
70% Ethanol			70% ethanol solution in water
96-well PCR and Real-time PCR plates	VWR	82006-636	For obtaining genomic DNA (from the mosquito leg)
96-well plate templates			House-made printed, for genotype recording
Bio Rad CFX96	Bio Rad		PCR machine with gradient and HRMA capabilities
Diversified Biotech reagent reservoirs	VWR	490006-896	
Exo-CIP Rapid PCR Cleanup Kit	New England Biolabs	E1050S	
Glass Petri Dish	VWR	89001-246	150 mm x 20 mm
Nunc Polyolefin Acrylate Sealing tape, Thermo Scientific	VWR	37000-548	To use with the 96-well PCR plates for obtaining genomic DNA
Phire Animal tissue direct PCR Kit (without sampling tools)	Thermo Fisher	F140WH	For obtaining genomic DNA and performing PCR
Precision Melt Analysis Software	Bio Rad	1845025	Used for genotyping the mosquito DNA samples and analyzing the thermal denaturation properties of double-stranded DNA (see protocol step 3.3)
Single-channel pipettor	Gilson		
Phire Animal tissue direct PCR Kit (without sampling tools)	Thermo Fisher	F140WH	For obtaining genomic DNA and performing PCR
SeqMan Pro	DNASTAR Lasergene software		For multiple sequence alignment
Single-channel pipettor	Gilson		