Geneaid™ Hot Start Taq PCR Master Mix with Dye

For research use only

Size : 100 reactions

Concentration : 2X (100 Units/ml of Taq polymerase, 0.5 mM dNTPs, 4 mM Mg^{2+})

Storage : 4 ºC for 1 year

Introduction

Geneaid™ Hot Start Taq PCR Master Mix with Dye includes all of the components necessary to perform PCR, with the exception of template and primer. Antibody modified Hot Start Taq DNA Polymerase, dNTPs, and reaction buffers are provided at optimized concentrations. Simply add primers, template DNA and sterile water to a final volume of up to 100 µl to complete the PCR reaction mix in routine PCR assays including colony PCR and recombinant screening PCR. In addition, the blue color DNA loading dye has already been mixed in the Geneaid™ Hot Start Taq PCR Master Mix. After PCR reaction, the PCR products could be conveniently loaded on the agarose gel without mix with loading dye in advance.

Quality Control

The quality of Geneaid™ Hot Start Taq Master Mix with Dye is tested on a lot-to-lot basis according to Geneaid's ISO-certified quality management system. Geneaid™ Hot Start Taq Master Mix with Dye is used for PCR reactions to amplify a 3,000 bp region of the green fluorescent protein gene (GFP). The PCR product is checked on an ethidium bromide-stained agarose gel.

Kit Contents

Name	HSTQ004	HSTQ100
Geneaid™ Hot Start Taq Master Mix with Dye	50 µl (4 rxns)	1.25 ml (100 rxns)

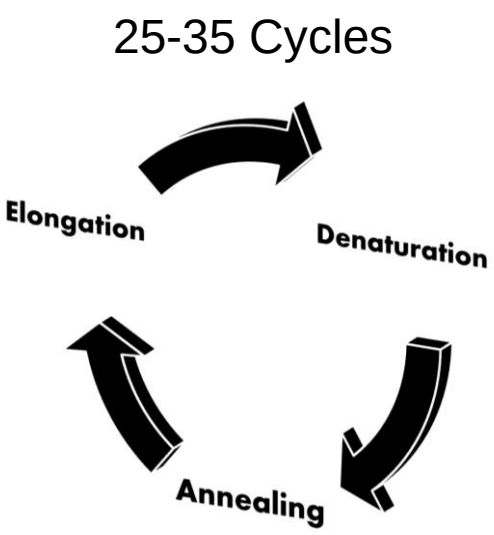
Geneaid™ Hot Start Taq PCR Master Mix with Dye Protocol

Reaction set up table

Component	For 25 µl	For 50 µl	Final Conc.
Forward primer (10 µM)	0.25-2.5 µl	0.25-2.5 µl	0.1-1.0 µM
Reverse primer (10 µM)	0.25-2.5 µl	0.25-2.5 µl	0.1-1.0 µM
DNA template	1-5 µl	1-5 µl	< 250 ng
Geneaid™ Hot Start Taq PCR Master Mix with Dye	12.5 µl	25 µl	1X
Nuclease-free H_2O	Up to 25 µl	Up to 50 µl	

General Geneaid™ Hot Start Taq PCR Master Mix with Dye Thermal Cycling Program

Initial Denaturation	• 95ºC • 1-5 minutes. (An initial denaturation of 1 min at 95°C is sufficient for most amplicons. For difficult templates, a longer denaturation of 2-3 min at 95°C is recommended. For colony PCR, an initial 5 min denaturation at 95°C is recommended.)
Step 2 Denaturation	• 95ºC. • 15-30 seconds.
Step 3 Annealing	• 50ºC-65ºC. • 30-60 seconds. • Optimal annealing temperature is dependent on the Tm value of the primers and the reaction condition.
Step 4 Elongation	• 72ºC • 1-5 minutes. • For 1 Kb of PCR product, elongate at 72ºC for 1 minute. Adjust elongation time based on product size (1 Kb/minute) for PCR products larger than 2 Kb.)
Step 6 Final Elongation	• 72ºC • 7 minutes
Step 7 Cooling	• 4ºC



Patent Disclaimer

Some applications in which this product can be used may be covered by patents issued and applicable in certain countries. Because purchase of this product does not include a license to perform any patented application, users of this product may be required to obtain a patent license depending upon the particular application and country in which the product is being used.