HiSense™ HotTaq PCR Premix

Cat. No. LHP-96, LHP-480

1. Product Information

Introduction

HiSense™ HotTaq PCR Premix is designed to facilitate PCR reaction by dispensing HiSense™ HotTaq PCR Master Mix into an 8-strip tube. It was dried by vacuum freezing drying method so that the user can use it immediately by adding a template, primers, and water.

This product is designed to inhibit the activity of Taq DNA polymerase at room temperature by including Taq DNA Polymerase and Taq antibody.

Taq antibody is isolated from Taq DNA polymerase and deactivated at over 50℃ within 3 minutes, so it can effectively inhibit primers/dimers without an enzyme activation step which requires more than 10 minutes.

Application

• Hot Start PCR
• DNA labeling reactions & TA-cloning
• 16S and 23S rRNA gene amplification
• Detection of bacteria in samples (e.g. blood)
• Allele specific PCR

2. Contents and Storage

Materials Provided

Label	LHP-96	LHP-480
2X HotTaq Premix	8-Strip × 12ea	8-Strip × 60ea

Storage

Store at -20℃

Check the label on the product for expiration date.

3. Test Protocol

Reaction mixture (for 20μl reaction)

Reaction components	Volume
2X HotTaq Premix	-
Forward primers, (10pmol/μl)*	1 μl
Reverse primers, (10pmol/μl))*	1 μl
Template DNA**	2 μl
DNase free water	up to 20 μl
Total volume	20 μl

* A final primer concentration of 0.5 μM is optimal in most cases but may be individually optimized in a range of 0.2 μM to 1.0 μM.
** The optimal quantity varies depending on the number of target copies present in the template solution. Use no more than 100 ng.

After tapping the 8-strip tube containing the above reaction mixture, briefly spin-down it. (Repeat until the reaction mixture is completely dissolved.)

PCR reaction condition

Steps & Cycles	Temp(℃)	Time	Cycles
Preheat	95	5 min	1
Denature	95	30 sec	25~35
Anneal*	60	30 sec	
Extend**	72	1 min	
Final extension	72	5 min	1

* Optimal annealing temperature depends on the melting temperature of the primers.
** Generally, 1 min/kb and higher than 3 kb, set it to 1.5 to 2.0 min/kb.