

## HelixAmp™ Color LAMP Lyo-Cake

### Kit Contents

HelixAmp™ Color LAMP Lyo-Cake	
Cat. No.	LPSLP-C96 (96rxns)
Color LAMP Lyo-Cake	8-strip x 12ea
10x Color LAMP Buffer	0.3ml x 1ea
8-Cap Strip	12ea
Instructions for Use	1ea

### Description

**HelixAmp™ Color LAMP Lyo-Cake** offers rapid detection of target DNA using loop-mediated isothermal amplification (LAMP). The kit employs a pH-sensitive dye, Neutral Red, to provide visual confirmation of amplification. The lyophilized formulation ensures stability for room-temperature storage and transport. Each cake contains dNTPs, Mg<sup>2+</sup>, salts, *Bst* DNA Polymerase, and Neutral Red dye. With an appropriate LAMP primer set, it facilitates detection within 20 minutes, indicated by a visible color change.

### Application

Loop-Mediated Isothermal Amplification (LAMP) of DNA  
Visible detection of results

### Storage

- Store at room temperature for a maximum of 6 months.
- For extended storage, keep at or below 4°C for up to 12 months.
- Protect from direct light exposure.
- After opening, reseal the pouch and store in a freezer for subsequent use.

## Quality Control

Each lot of **HelixAmp™ Color LAMP Lyo-Cake** was tested against predetermined specifications to ensure consistent product quality.

## Protocol

### 1. Reaction Mixture

Add the following components to a tube containing the Color LAMP Lyo-Cake and mix well:

Components	Volumes
Template <sup>1)</sup>	X $\mu$ l
Primer mix <sup>1), 2)</sup>	2 $\mu$ l
10x Color LAMP Buffer	2.5 $\mu$ l
RNase-free Water	Adjust to final 25 $\mu$ l

<sup>1)</sup> Use RNase-free water for primer stock preparation and template dilution. Avoid any other buffered solutions.

<sup>2)</sup> Recommended primer concentrations per reaction:

- ◆ FIP/BIP Primers: 40 $\mu$ M/rxn.
- ◆ LF/LB Primers: 20 $\mu$ M/rxn.
- ◆ F3/B3 Primers: 5 $\mu$ M/rxn.

Adjust primer concentrations if efficiency is low or non-specific amplification occurs.

### 2. Reaction Condition

Incubate at 65°C for 20~40 minutes.

If the target is amplified, the color changes from yellow to pink.

Adjusting the incubation time according to the primer set is recommended. If the color change is not obvious after a 20 minutes reaction, continue incubating at 65°C for an additional 10-20 minutes. Cool the reaction at room temperature to observe distinct color changes.

## Products

Cat. No.	Products	Size
LPSLP-C96	HelixAmp™ Color LAMP Lyo-Cake	96rxns