

RealHelix™ qPCR Lyo-Cake [Probe]

Kit Contents

RealHelix™ qPCR Lyo-Cake [Probe]		
Cat. No.	LDFQP-C96 (96rxns)	LDFQP-C480 (480rxns)
qPCR Lyo-Cake [Probe]	8-strip x 12ea	8-strip x 60ea
RNase-free Water	1.0ml x 2ea	1.0ml x 10ea
8-Cap Strip	12ea	60ea
Instructions for Use	1ea	1ea

Description

RealHelix™ qPCR Lyo-Cake [Probe], a lyophilized qPCR reagent, provides a probe-based rapid qPCR amplification of DNA targets. Through the lyophilization method, moisture is removed from the product to facilitate the storage or transportation of products at room temperature. The Lyophilized qPCR premix can be rehydrated simply by adding RNase-free Water along with primers and templates.

RealHelix™ qPCR Lyo-Cake [Probe], contains antibody-inhibited hot-start Taq DNA polymerase, dNTPs, Mg²⁺, salts, and stabilizing agents. This kit provides specific amplification of target DNA with minimizing non-specific reactions and generations of dimer between primers.

Application

Quantitative real-time PCR

Storage

- Store at room temperature for a maximum of 6 months.
- For extended storage, maintain the product at or below 4°C for up to 12 months.
- Please protect it from direct light exposure.
- After opening the pouch, we suggest promptly resealing it and storing it in a freezer until the next use.

Quality control

Each lot of **RealHelix™ qPCR Lyo-Cake [Probe]** was tested against predetermined specifications to ensure consistent product quality.

Protocol

1. Reaction Mixture

- (1) Remove the seal of the lyophilized cake tube.
- (2) Add the reaction components to the lyophilized qPCR cake tube as in the following table.

Components	Volumes
DNA Template	1 ~ 5µl
Forward primer (10µM)	0.5 ~ 1.0µl
Reverse primer (10µM)	0.5 ~ 1.0µl
Probe (10µM)	0.5 ~ 1.0µl
ROX Dye ¹⁾	Optional
RNase-free Water	Adjust to final 20µl

- ¹⁾ Use the recommended amount of ROX Dye (Passive Reference) depending on the instrument. ROX Dye (Passive Reference) is not included in this kit.

- (3) Seal the tube with a cap strip. Gently tap the reaction mix and centrifuge briefly.
- (4) Perform the real-time PCR.

2. PCR Condition

Program a real-time PCR instrument according to the recommendations below.

Step	Condition		Cycle(s)
Enzyme Activation	95°C for 2 ~ 5 min		1
PCR Amplification	Denaturation	95°C for 5 ~ 10 sec*	45
	Annealing & extension	55 ~ 60°C for 10 ~ 30 sec* Collect the fluorescence data	

* The reaction time for each step should be optimized on the applied thermocycler.

Products

	Products	Cat. No.	Size
Cake type	RealHelix™ qPCR Lyo-Cake [Probe]	LDFQP-C96	96rxns
		LDFQP-C480	480rxns
	RealHelix™ qPCR Lyo-Cake [Probe] [UDG System]	LDFQPU-C96	96rxns
		LDFQPU-C480	480rxns
	RealHelix™ qRT-PCR Lyo-Cake [Probe]	LDFQR-C96	96rxns
		LDFQR-C480	480rxns
	RealHelix™ qRT-PCR Lyo-Cake [Probe] [UDG System]	LDFQRU-C96	96rxns
		LDFQRU-C480	480rxns
Bead type	RealHelix™ qPCR Lyo-Dot [Probe]	LDFQP-B96	96rxns
	RealHelix™ qPCR Lyo-Dot [Probe] [UDG System]	LDFQPU-B96	96rxns
	RealHelix™ qRT-PCR Lyo-Dot [Probe]	LDFQR-B96	96rxns
	RealHelix™ qRT-PCR Lyo-Dot [Probe] [UDG System]	LDFQRU-B96	96rxns