

Ver.25011

## Real-Time PCR Kit

(with SYBR Green)

Cat.No. ODQ193

**Description:** Real-Time PCR kit provides separate components required to run a real-time PCR reaction. *h-Taq* DNA polymerase enables high specific DNA amplification due to its capability of HotStart.

### Product contents

Components	Volume
<i>h-Taq</i> DNA Polymerase (5U/ $\mu$ L)	250U
10X <i>h-Taq</i> Reaction Buffer (with 25mM MgCl <sub>2</sub> )	1mL
10mM dNTP	200 $\mu$ L
50X SYBR Green	50 $\mu$ L

### Storage

- Store at  $-20^{\circ}\text{C}$
- Stable for 1 year

### Features

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Application	<ul style="list-style-type: none"> <li>• Quantification of target DNA using Real-Time PCR.</li> <li>• Quantification of target RNA using RT-PCR.</li> <li>• High Resolution Melting (HRM) analysis.</li> <li>• Amplification size is <math>&lt; 1</math> kb PCR.</li> <li>• HotStart activity (Chemically-modified HotStart)</li> </ul>

### Recommended PCR mixture and cycling condition

PCR mixture (Reaction vol. 20 $\mu$ L)		Cycle		
10X <i>h-Taq</i> Reaction Buffer (with 25mM MgCl <sub>2</sub> )	2 $\mu$ L	95 $^{\circ}\text{C}$	15min	$\times 1$
10mM dNTP	0.5 $\mu$ L	95 $^{\circ}\text{C}$	20sec	} $\times 40-50$
<i>h-Taq</i> DNA Polymerase (5U/ $\mu$ L)	0.2 $\mu$ L	AT	1min	
Forward primer (10pmol/ $\mu$ L)	1 $\mu$ L	72 $^{\circ}\text{C}$	1min/kb	
Reverse primer (10pmol/ $\mu$ L)	1 $\mu$ L	72 $^{\circ}\text{C}$	5 min	$\times 1$
50X SYBR Green	0.2 $\mu$ L			
Template DNA ( $< 300\text{ng}$ )	- $\mu$ L			
Add D.W to	20 $\mu$ L			

- Amount of template, extension time, annealing temperature, and the number of PCR cycles according to the target size, primer's T<sub>m</sub>, and the type of templates for amplification may be modified as per requirement.