EzWay™ Hot Taq PCR MasterMix

1. Catalog No.

Cat. No	Product	Size
K0567510	EzWay™ Hot Taq PCR MasterMix (2X)	1ml
K0567520	EzWay™ Hot Taq PCR MasterMix (2X)	5ml (1ml x 5)

2. Storage

1 year at -20°C
(The product is able to be shipped on blue ice and should be stored immediately at -20°C.)

3. Contents

Component	Cat.No	K0567510	K0567520
2X EzWay™ Hot Taq PCR MasterMix	K0567510	O (1.0ml)	-
	K0567520	-	O (5.0ml)
4x Magic Buffer **(Only use for High G+C content)**	K0561031	O (1.0ml)	O (5.0ml)

4. Description

2X EzWay™ Hot Taq PCR MasterMix is a premixed solution containing Hot Taq DNA Polymerase, Hot Taq PCR Buffer, dNTPs, dye and additives. Hot Taq DNA Polymerase, a chemically modified form of Taq DNA Polymerase, provides high specificity in hot-start PCR.
Room-temperature reaction setup using 2X EzWay™ Hot Taq PCR MasterMix is fast and easy. Simply add 1 volume of primers and template DNA diluted in the distilled water into equal volume of 2X EzWay™ Hot Taq PCR MasterMix. Pipetting steps are minimized, reducing the possibility of errors and contamination. The combination of high specificity and easy handling makes the 2X EzWay™ Hot Taq PCR MasterMix ideal for use with complex genomic or cDNA templates, multiple primer pairs, templates isolated from difficult sources, genetic screening in which large numbers of samples are amplified, quantitative real-time PCR and laboratory PCR automation..

- High PCR specificity
- Reduced non-specific amplification
- Simple reaction setup at room temperature
- Easy PCR handling
- Minimal optimization required
- High reproducibility

5. Application

- Highly Specific PCR
- Low Copy Number Target PCR.(e.g. Viral Detection in Blood)
- RT-PCR of rare transcript
- Real-time PCR
- Differential Display
- Multiplex PCR, PCR-based DNA fingerprinting (VNTR, STR, and RAPD) etc.
- Degenerate PCR

6. PCR Amplification

1. Add the following reagents to a thin-walled PCR microcentrifuge tube or plate. Keep the master mix on ice.

Component	Final Concentration	Volume/reaction	
2X EzWay™ Hot Taq PCR MasterMix	1X	10 µL	25 µL
5' Primer	0.1 - 0.5 uM	Variable	Variable
3' Primer	0.1 - 0.5 uM	Variable	Variable
Distilled water	-	Variable	Variable
Template	-	Variable	Variable
Total reaction volume		**20 µL**	**50 µL**

2. Mix gently.

3. When using a thermal cycler without a heated lid, add approximately 100ul of mineral oil on top of the mixture.

4. Perform thermal cycling.

Step		Temp.	Time	Cycles
Initial Denaturation		95℃	15 min	1
Cycling	Denaturation	94℃	0.5-1 min	25-35
	Annealing	50-68℃	0.5-1 min	
	Extension	72℃	1 min (~1kb/imin)	
Final Extension		72℃	10 min	1

Note:

a. Primers should be 15 to 30 bases in length and near 50% G+C content.

b. **Magic Buffer is not necessary for normal G+C content. It will improve DNA amplification of templates that have a high G+C content and a high degree of secondary structure.** We recommend that the volume added should not exceed 25 % (v/v) of final PCR volume.