

EzWay™ Taq PCR ReadyMix

1. Catalog No.

Cat. No	Product	Size
K0563002	EzWay™ Taq PCR ReadyMix (2X Liquid) 20ul rxn/0.2ml thin-walled	96Tubes
K0563003	EzWay™ Taq PCR ReadyMix (2X Liquid) 20ul rxn/0.2ml thin-walled	480Tubes

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	ReadyMix	ReadyMix
EzWay™ Taq PCR ReadyMix	K0563002	O (96tubes)	-
	K0563003	-	O (480tubes)

4. Description

The EzWay™ Taq PCR ReadyMix is a mixture containing Taq DNA Polymerase, Taq PCR buffer, dNTPs and MgCl₂. The EzWay™ Taq PCR ReadyMix provides robust performance in a wide range of PCR applications without the need for time-consuming optimization. Only primers and template DNA are added to prepare the final PCR. The EzWay™ Taq PCR ReadyMix contributes to highly reproducible PCR by reducing pipetting errors and miscalculation.

- Premix of Taq DNA Polymerase, Taq PCR buffer, dNTPs, MgCl₂ and additives in 0.2ml PCR tubes
- Source: E. coli, recombinant gene from Thermus aquaticus
- Amplification range:
 - Lambda DNA: up to 6Kb (Max. 12Kb)
 - Human genomic DNA: up to 2Kb (Max. 4Kb)
- A time saving preparation
- Reduced risk of handling errors and contamination
- 5'→3' exonuclease activity
- Extra A addition (terminal transferase) activity
- Easy handling and shipping due to temperature stability

5. Application

- Amplification of genomic DNA and cDNA targets up to 3kb long
- GC-rich sequences or secondary structures
- TA Cloning
- Differential Display
- Degenerate PCR

6. PCR Amplification

1. Add the following reagents to a thin-walled PCR microcentrifuge tube or plate.

Component	Final Concentration	Volume/reaction
EzWay™ Taq PCR ReadyMix	1X	Ready-to-use
5' Primer	0.1 - 0.5 uM	Variable
3' Primer	0.1 - 0.5 uM	Variable
Distilled water		Variable
Template		Variable
Total reaction volume		20 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	94°C	2-5 min	1
Cycling	Denaturation	94°C	0.5-1 min
	Annealing	50-68°C	0.5-1 min
	Extension	72°C	1 min (~1kb/imin)
Final Extension	72°C	10 min	1

Note:

- a. Primers should be 15 to 30 bases in length and near 50% G+C content.
 - b. Magic Buffer 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.
5. The amplified DNA can be detected by various electrophoresis techniques. The most common techniques are agarose or polyacrylamide gel electrophoresis depending on the size of the amplicon.