



EzWay™ Opti-PCR Kit

Efficiency and specificity of amplification highly depends on the nature of template DNA and primers. Therefore, optimization of reaction conditions to obtain satisfactory results is necessary because of a large number of variables such as pH, concentrations of salt and magnesium ions etc.

EzWay™ Opti-PCR is designed for supplying the simple procedure to optimize PCR conditions which may take much time and effort. The ready-to-use reaction buffers will cover a wide range of possible values for all ingredients. Furthermore, the Magic buffer supplied in this kit will be helpful to obtain sufficient specificity of amplification of high GC template DNA. Besides 15 different Opti-PCR buffers (5, 10, 15, 20, 25mM MgCl<sub>2</sub> based buffers at pH 8.3, 8.7, 9.0 respectively), the most popular additives and cosolvents such as BSA, formamide, dimethyl sulfoxide (DMSO) and glycerol are also included in the kit as well.

■ Features

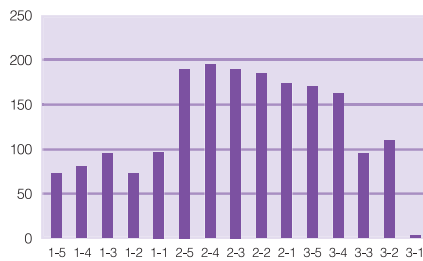
- To ensure a perfect PCR every time
- For optimized specificity and yield of PCR
- A collection of 15 different buffers (variation of the pH-range and the MgCl<sub>2</sub> concentration)



Figure 1.

PCR result for a portion of the cellulase of *Messerschmidia sibirica* L gene.

A Agarose electrophoresis of PCR products



B Density of each band of A.



1-5: pH 8.3, 2.5mM MgCl <sub>2</sub>	2-5: pH 8.7, 2.5mM MgCl <sub>2</sub>	3-5: pH 9.0, 2.5mM MgCl <sub>2</sub>
1-4: pH 8.3, 2.0mM MgCl <sub>2</sub>	2-4: pH 8.7, 2.0mM MgCl <sub>2</sub>	3-4: pH 9.0, 2.0mM MgCl <sub>2</sub>
1-3: pH 8.3, 1.5mM MgCl <sub>2</sub>	2-3: pH 8.7, 1.5mM MgCl <sub>2</sub>	3-3: pH 9.0, 1.5mM MgCl <sub>2</sub>
1-2: pH 8.3, 1.0mM MgCl <sub>2</sub>	2-2: pH 8.7, 1.0mM MgCl <sub>2</sub>	3-2: pH 9.0, 1.0mM MgCl <sub>2</sub>
1-1: pH 8.3, 0.5mM MgCl <sub>2</sub>	2-1: pH 8.7, 0.5mM MgCl <sub>2</sub>	3-1: pH 9.0, 0.5mM MgCl <sub>2</sub>

■ Ordering Information

Cat.No.	Description	Size
K03810	EzWay™ Opti-PCR Kit	100 Test



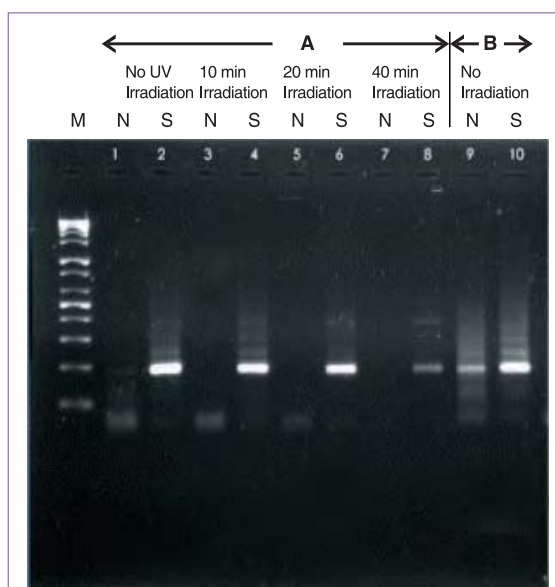
**EzWay™ Contam-Free PCR Solution**

Removing of DNA contaminants is the most important factor for the accurate PCR (Polymerase Chain Reaction) result. Even the trace amount of DNA contaminants can serve as templates, thus it results in amplification of the wrong template and leads to a false positive result. Ensuring that the previous PCR products (carry-over contamination) are not reamplified in subsequent PCR amplification is very important especially in the laboratory that performs PCR as a routine work such as clinical diagnosis or environmental monitoring.

EzWay™ Contam-Free PCR Solution is designed to eliminate DNA contaminants before PCR amplification using a photochemical that effectively destroys DNA's ability to act as template for PCR. This photochemical is intercalated into double-stranded nucleic acids and form a covalent interstrand crosslink after photoactivation with UV light. Therefore, it is useful to extinguish the template activity of contaminating DNAs.

**■ Features**

- An easy-to-use solution: Just mix with your PCR premix and then exposure to UV light
- Prevention of contamination : Elimination of DNA contaminants
- High efficiency of the PCR : No-false positive



Lane N : No Template  
 Lane S : Plus Template  
 Lane M : DNA Ladder  
 Lane 1-8 (panel A) : Treatment of EzWay™ Contam-Free PCR Solution plus UV Irradiation  
 Lane 9-10 (panel B) : No treatment of either EzWay™ Contam-Free PCR Solution nor UV Irradiation

False-positive results for the no-template controls (Lane N in Panel B) under no treatment of EzWay™ Contam-Free PCR Solution were shown. No false-positive signals were detected when the master mixture was treated with EzWay™ Contam-Free PCR Solution and UV irradiation as shown in Panel A. According to this experiment, UV exposure times were optimized in the range of 10 min.

**■ Ordering Information**

Cat.No.	Description	Size
K33100	EzWay™ Contam-Free PCR Solution	500 ul