



Gene RED PCR Mix Plus

I. Product Description

Gene RED PCR Mix Plus is a 2x pre-mixed reagent for PCR. Gene RED PCR Mix Plus contains *Taq* DNA Polymerase, dNTPs, Mg²⁺, etc., PCR can be performed just by adding template DNA and primers. Since Gene RED PCR Mix Plus contains gel-loading buffer, the reaction mixture after PCR can be directly applied to agarose gel electrophoresis.

II. Storage

−20°C

III. Product content

Reagent	Volume	
Gene RED PCR Mix Plus (2x)	1.2 ml x 1	for 48 reactions
	1.2 ml x 2	for 96 reactions

IV. Remarks

Gene RED PCR Mix Plus is applicable to high-speed PCR and colony PCR.

Since Gene RED PCR Mix Plus contains *Taq* DNA Polymerase, the obtained PCR products can be used for TA cloning.

Gene RED PCR Mix Plus contains 2 dyes (red, yellow); the dyes do not inhibit PCR.

The dyes migrate through agarose gel at approximately the same rate as linear double-stranded DNA base-pairs in length as described in the table below.

	red dye	yellow dye
1.5% Agarose S	1,500 bp	below
3% Agarose 21	160 bp	50 bp

V. Protocol (example)

1. Prepare the reaction mix (50μl volume).

Gene RED PCR Mix Plus (2x)	25μl
Primer-forward (10μM)	0.6μl
Primer-reverse (10μM)	0.6μl
Template DNA	10 pg – 100 ng
d.d.H ₂ O	up to 50μl

2. Amplification of 0.5–10 kbp fragments by using lambda DNA as template.

94°C	3 min.
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94°C	20 sec.
65°C	20 sec.
72°C	10 sec./kbp*

× 25 cycles

*5 sec for less than 1 kbp.

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72°C	7 min.
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3. Load 5 μl of the reaction mix after PCR in a well of agarose gel for electrophoresis.

For research purposes only. Not for use in diagnostic procedures for clinical purposes.