

Golden Easy PCR System

Cat. no. 4993004

Storage:

For long term storage, store at -20°C. The product can be stored up to one year at 4°C. For regular use, please store at 4°C.

Contents	4993004
Golden DNA Polymerase	500 U
2× Reaction Mix	2×5 ml
Loading dye in Reaction Mix	Yes

Introduction

Golden Easy PCR Kit is a double component Easy PCR System which contains Golden DNA Polymerase and 2× Reaction Mix. It is characterized by rapidity, simplicity, high sensitivity, strong specificity, good stability and minimizing human errors. It is suitable for routine PCR reaction, amplification and large-scale gene detection of complex templates such as high GC content (>60%) and of secondary structure..

Product Components

- 2× Reaction Mix: 500 μM dNTP each
20 mM Tris-HCl (pH8.3)
100 mM KCl
3 mM MgCl₂
Stabilizer and enhancer
- Golden DNA Polymerase: 2.5 U/μl

Quality control

No exogenous nuclease activity was detected. Effectively amplify single copy genes in human genome. After one week storage at room temperature (15-25°C), there was no obvious change in activity.

Description

This product is designed to allow the user for quick and easy preparation of reaction mixture, which can avoid contaminating during the PCR operating process. For PCR reaction set-up, the user just need to pipette an aliquot part of 2× Reaction Mix and Golden DNA Polymerase, dilute the Reaction Mix to 1× by adding templates, primers and water up to the reaction volume. After PCR amplification, PCR products of Loading dye Mix can be loaded directly without the additional loading buffer. 2× Reaction Mix and Golden DNA Polymerase are separated in this kit to master the enzyme dosage flexibly according to specific experiment. If the enzyme is added to the 2× Reaction Mix, it can be stably stored.

Application

- Gene detection:** there is almost no difference between different batches of this product, especially suitable for large-scale gene detection, semi-quantitative PCR experiment and trace DNA detection.
- Complex template amplification (secondary structure, GC rich and repeat sequence):** PCR products with A can be cloned directly with T/A vector after purification

Example

Note: The following example is only for reference, user must set up optimal reaction system according to different reaction conditions such as different templates or primers etc.

1. For 25 μl PCR reaction system: 1 kb fragment of human genomic DNA was amplified by the Golden Easy PCR System (If use different reaction system, please proportionally increase or decrease the amount of reaction components referring to this system).

Template	< 1 μg
Primer 1 (10 μM)	1 μl
Primer 2 (10 μM)	1 μl
Golden DNA Polymerase	0.25-0.5 U
2× Reaction Mix	12.5 μl
ddH ₂ O	up to 25 μl

- PCR reaction cycle set-up:

94°C 3 min	}	30 cycles
94°C 30 sec		
55°C 30 sec		
72°C 1 min		
72°C 5 min		

3. Result detection: After the reaction, 5 μl of the reaction product was detected by agarose gel electrophoresis