



Yeastern Biotech Co., Ltd

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RealStart DNA Polymerase Premix

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Cat. No.
FYT101-100P
FYT102-100P

RealStart DNA Polymerase Premix

Volume: 1.25 ml

Storage: -20°C

Description

RealStart DNA Polymerase premix is an ultra-sensitive and convenient PCR premix product. It contains 2× concentrated solution of HotStart DNA polymerase, dNTPs, optimized buffers, and loading dye (optional) needed for PCR. The only step it takes to perform PCR with RealStart DNA Polymerase premix is to add DNA template and primers into the reaction mix. Since special HotStart DNA polymerase in the premix is activated after heating, it greatly reduces non-specific amplification when working with the premix at room temperature.

Component	FYT101-100P	FYT102-100P
2X RealStart DNA Polymerase Premix	1.25 ml (w/o loading dye)	1.25 ml (w/ loading dye)

RealStart DNA Polymerase Premix Contents:

- Hotstart Taq DNA polymerase
- dNTPs mix (including dATP, dCTP, dGTP, dTTP)
- 7.5 mM MgCl₂
- Loading dye (including bromphenol blue)

Unit Definition

One unit is defined as the amount of enzyme that will incorporate 10 nmol of dNTPs into acid-insoluble material in 30 minutes at 72°C.

Quality Control

Nuclease activity is not detected after incubation 1 µg lambda/HindIII DNA with 5 units RealStart DNA polymerase in 50 µl of the supplied reaction buffer for 18 hours at 37°C.

Procedure

A. Preparation of the PCR Master Mix

1. Prepare a master mix according to Table 1.
2. Mix the master mix thoroughly by pipetting up and down. Dispense the master mix into PCR tubes or plates.

Table 1. Reaction components for RealStart PCR mixture

Component	Volume	Final conc.
RealStart DNA Polymerase Premix	12.5 µl	1X
Forward Primer (10 µM)	0.75 µl	0.3 µM
Reverse Primer (10 µM)	0.75 µl	0.3 µM
Template DNA	0.5-10 µl	
ddH ₂ O	variable	
Total volume	25 µl	



B. Performing PCR

1. Program your instrument according to Figure 1.
2. Place the PCR tubes or PCR plates in the thermo cycler and start the cycling program.

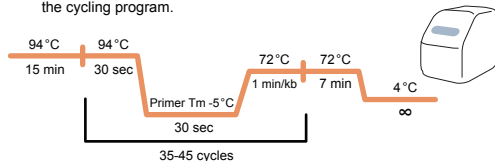


Figure 1. RealStart PCR cycling conditions

Features and Benefits

- Less Chance of Contamination—Reduce non-specific amplification caused by mispriming events that occur during setup and initial temperature increase.
- High Sensitivity—The sensitivity level is equivalent to that of real-time PCR.
- Convenient—An excellent tool when working with large quantities of samples.
- Work well with T&A™ Cloning Kit (FYC001-20P)

Note

For research use only. Not for use in diagnostic or therapeutic procedures.