

Yeast Colony Rapid Detection Kit

Catalog Number

RY8001

Storage:

Stored at -20°C for 1 year.

Components

Components	RY8001-01	RY8001-02	RY8001-03
2×Yeast PCR mix	1 ml	1 ml*2	1 ml*8
Yeast lysis buffer	200 µl	400 µl	1.6 ml

Product Description

This kit is used to amplify fragments from the yeast genome as well as transformed plasmids. The component contains a visualization green dye, which can directly perform polyacrylamide gel electrophoresis and agarose gel electrophoresis after PCR. The PCR product has A- tailing at the 3' end, which is suitable for TA cloning.

Yeast lysis buffer is used to lyse yeast's cell wall and release the genome. The lysed production can be directly used for PCR experiments without genome extraction.

2×Yeast PCR mix contains PCR buffer, dNTPs, MgCl₂, and Hot Start Taq DNA Polymerase. Simply add primers and template/yeast colonies for amplification, reducing pipetting operation times which causes less pollution and improves the detection throughput and the results reproducibility. The protective agent added to the system allows 2×Yeast PCR mix to maintain stable activity after repeated freezing and thawing.

Experiment Process

1. Add 3-3.5 µl of Yeast lysis buffer into a PCR tube and then using a sterile pipette tip to transfer yeast colony into this same PCR tube.
2. Mix thoroughly by pipetting up and down, then incubate at 98°C for 10-20 min (Step 2).
3. Prepare reaction solution into a new PCR tube according to the reaction system table below:

Reaction System

2×Yeast PCR mix	25 µl
Primer F* (10 µM)	2 µl
Primer R* (10 µM)	2 µl
Template*	1 µl
ddH ₂ O	up to 50 µl

Primer F* : T7: TAATACGACTCACTATAGGGCGAGCGCCGCCATGGAGTACCCATACGACG

Primer R* : AD: CTGTGCATCGTGCACCATCTCAATTTCTTTCATTTATAACATCGTTTTGCC

Template*: Briefly centrifuge the PCR tube from Step 2, then pipetting up and down mixed well, and transfer 1 μ l of lysate as a template.

4. Place the reaction solution tube into a PCR instrument and run the following program:

Temperature	Time	Cycles
95 °C (Initial denaturation)	3 min	1
95 °C	15 sec	
Tm*	15 sec	30-32
72 °C	15 sec/kb	
72 °C (Final extension)	5 min	1
4 °C	∞	1

* Adjust the annealing temperature according to the Tm value of the primer. It is recommended to set the annealing temperature 5°C lower than primer Tm.