Fastract Direct PCR Kit® for Hair

#G45317A **100 Reactions**

Storage: Please refer to Table 1

Introduction

Fastrack Direct PCR Kit® for Hair is designed to perform PCR directly from hair without prior DNA purification. Freshly collected or old samples, all are suitable for this kit. The kit employs a specially engineered high-fidelity DNA polymerase enzyme that exhibits high resistance to many PCR inhibitors. The kit ensures high yield and is time saving as DNA isolation from samples can be avoided prior to PCR. The kit is recommended for end-point PCR.

Kit Components

Components	Amount	Storage
Fastract Lysis Buffer	5ml	4°C
Fastract 1X PCR Mix	1.25ml x 2	-20°C
Control Primer (F), 10uM	10ml	-20°C
Control Primer (R), 10uM	10ml	-20°C

Guidelines for sample handling

- When working with Hair, it is recommended add directly in the Fastract Lysis Buffer.
- Collect samples in a PCR tube, add 30ul Fastract Lysis Buffer, vortex well and incubate them at 950C for 15 minutes.
- After incubation centrifuge the PCR tubes at 15000rpm for 5 minutes. Collect the clear supernatant in a separate microfuge tube.
- Use 1 ul of this clear lysate as template for the PCR reaction.

Guidelines for PCR setup

- Add 23.5ul 1X Fastract Direct PCR mix in a Flat Capped PCR tube.
- Add 0.25ul of each Primer (from 10mM stock) to the master mix.
- Use 1 µl of Fastract lysate as template for the PCR reaction.
- While setting up the PCR cycle keep the initial denaturation
- time to be 5 minutes at 95^{O}C followed by denaturation at 95^{O}C for 10 -15s and annealing at the desired Tm. For extension, use 1min for 1Kb amplicon size.

Guidelines for Control reactions

We recommend setting up a separate control PCR reaction (use provided primer as working stock) with the Fastrack lysate used in the actual experiment to ensure that the PCR conditions are optimal. Tm for control primer is 58^{O}C and it amplifies a 363bp fragment from a highly conserved region of human mitochondrial DNA. It is recommended to add a no-template control to all PCR assays

Important Notes

- Carefully mix and spin down all tubes before opening to ensure homogeneity and improve recovery. The PCR setup can be performed at room temperature.
- Always add the FastTrack lysate last to the reaction.
- Always ensure that the volume of lysate that is being added to the PCR reaction is 4% of the total reaction volume. Do not add more lysate to the reaction mix.

Troubleshooting

In case of non-specific amplification, increase the annealing temperature, reduce the total number of cycles or design a new set of primers