Minute™ PCR Template Prep Kit

Catalog Number: PC-020

Description

Invent Biotechnologies PCR template Prep Kkit is designed to extract genomic DNA from animal tissues (such as mouse tail), cultured cells and blood (fresh or anti-coagulated with EDTA, citrate, or heparin) for polymerase chain reaction (PCR).

Features

Solution based single tube protocol. Extract Genomic DNA from mouse tail, cultured cells and blood in 5 min. No toxic chemicals. This kit provides rapid and consistent results.

Kit Components

Solution A	30 ml
Solution B	20 ml
Solution C	2.0 ml

Shipping: This kit is shipped at ambient temperature
Storage: Store the kit at room temperature
Shelf life: 1 year

Procedures

Step 1

A. **Mouse tails**: Place 2-3 mm mouse tail in a 0.5 ml microcentrifuge tube containing 300ul solution A. Proceed to step 2.
B. **Cultured cells**: Add 1 X 10^4-1 X 10^5 cell suspension in <10 ul to a 0.5 ml microcentrifuge tube containing 300ul solution A **or** add 200 solution A to a cell pellet that contains 1 X 10^4-1 X 10^5 cells. Proceed to step 2.
C. Blood (fresh or anti-coagulated): Add 5-10ul blood into a 0.5 ml microcentrifuge tube containing 300ul solution A

Note: The function of buffer A is to lyse RBC in tissue/blood samples. It can also breakup plasma membranes without lysing the nuclei if cultured cells are used.

Step 2 Vortex the tube (s) briefly and incubate at room temperature for 2 min. Centrifuge at 10,000 rpm for 1 min, discard supernantant without disturbing the tails or cell pellets. Add 60 ul solution B (DNA extraction buffer) to the tube (s).

Step 3 Place the tube (s) in a thermocycler and heat at 95°C for 2 min . Cool the tube to room temperature. Add 6ul solution C and vortex briefly. Extracted genomic DNA is now ready for use as PCR temperate or for longer term storage at -20°C.

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Recommended PCR conditions

***PCR reaction mix:**

2 X PCR master mix	25ul
Primers (forward/reverse)	1-2ul (0.5-1.0uM each)
DNA temperate	5-10ul
H2O	to 50ul

PCR amplification:

A.	Denaturing:	95°C 3 min (1 cycle)
B.	Denaturing:	95°C 30”
C.	Annealing:	55-64°C 1 min
D.	Extension:	68-72°C 45”

Repeat B-D for 30-35 cycles

* If desired final reaction volume can be reduced to 25ul

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