PCR conditions

94 °C, 1min

↓

94 °C, 1min
59 °C, 1min
72 °C, 2min
} 40 cycles

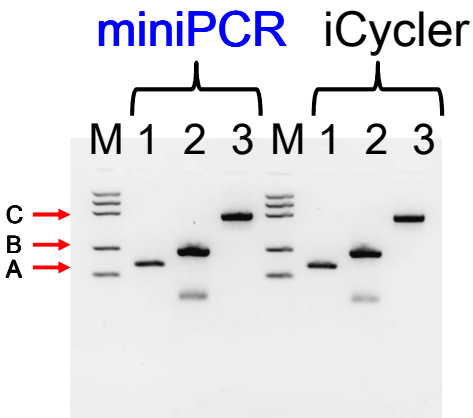
↓

72 °C, 1min

Reaction tube: Thin-wall PCR tube (Bio-Rad Laboratories)
Thermal cycler: **miniPCR** and iCycler (Bio-Rad Laboratories)

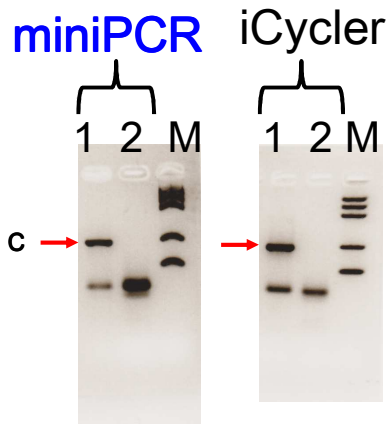
Electrophoretic conditions
Voltage and time: 100V for 30 min
Running buffer: 0.5xTAE
Gel: 4% agarose (Nusieve 3:1)
The gel was stained with EtBr.

M. OTO 01



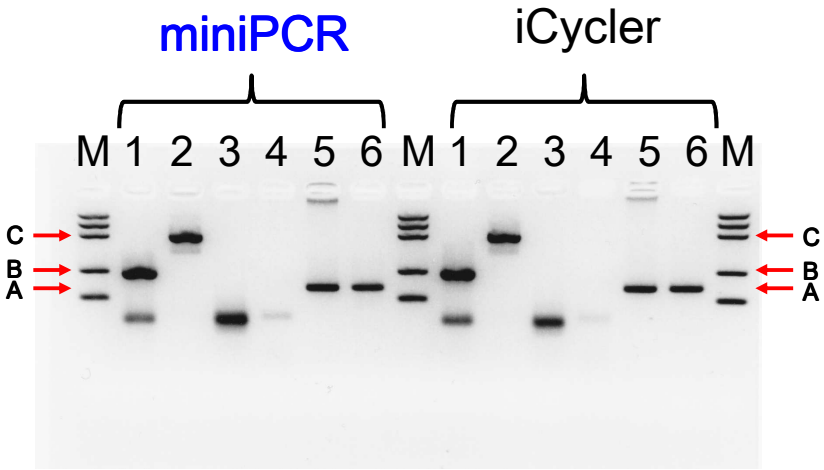
Typical electrophoretic profiles of PCR-amplified DNA fragments
PCR-amplified DNA fragments: 130bp (A), 200bp (B), and 400bp (C)
1: Genomic DNA from human cheek cells (about 100ng DNA/PCR tube)
2, 3: Genomic DNA from plant cells (about 100ng DNA/PCR tube)

M. OTO 02



Effect of annealing temperature
1: 54 °C, 2: 59 °C
Template DNA: about 5ng DNA/PCR tube

M. OTO 03



Electrophoretic profile of various PCR-amplified DNA fragments.
Lanes 1 and 3 are 200bp (B), lanes 2 and 4 are 400bp (C) and lanes 5 and 6 are 130bp (A).
1-4: Genomic DNA from plant cells
[Amounts of template DNA: 1, 2; about 100ng DNA/PCR tube, 3, 4; about 5ng DNA/PCR tube]
5, 6: Genomic DNA from human cheek cells (about 5ng DNA/tube)

M. OTO 04