quickAmp™ Plant Genomic DNA PCR Kit

Storage
The kit should be stored at −20°C.

Procedure
All steps are performed at room temperature unless otherwise noted.

A. Plant Cell DNA Extraction

1. Rinse the paper punch and forceps in 70% ethanol prior to use and between the handling of different samples.

2. Punch a 0.5 to 0.7 cm disk of leaf tissue or frozen leaf tissue into a 1.5 ml or 2 ml microcentrifuge tube using a standard one-hole paper punch.

3. Pipette 100 µl of Extraction Solution into the tube and vortex briefly.

4. Incubate samples at 95°C for 10 minutes.

5. Add 100 µl of Neutralization Solution to sample and mix by vortexing.

6. Store the neutralized leaf extract at 4°C or use immediately in PCR. Continue with Section B, Step 1.

B. PCR Amplification

ACTGene *Taq* mastermix, ACTGene Hot-Start *Taq* mastermix, ACTGene Blue/Red *Taq* mastermix, or ACTGene Blue/Red Hot-Start *Taq* mastermix can be used for the following PCR amplification steps. Typical final primer concentrations are approximately 0.4 µM each. Primer concentrations and thermal cycling parameters should be optimized depending on the system.

1. Add 10 µl of PCR mastermix (2x), 4 µl of leaf disk extract, and proper amount of primers to a thin-walled PCR microcentrifuge tube or plate. Bring the total volume to 20 µl with PCR grade water. Gently mix well. Note: If less than 4 µl of leaf disk extract is added to the PCR reaction volume, use a 50:50 mixture of Extraction Solution : Neutralization Solution to compensate the volume of tissue extract to 4 µl.

2. Perform thermal cycling using optimized amplification parameters.

3. Load the amplified DNA onto agarose gel after the PCR is completed.