

Phire® Plant Direct PCR Kit

DIRECT PCR™

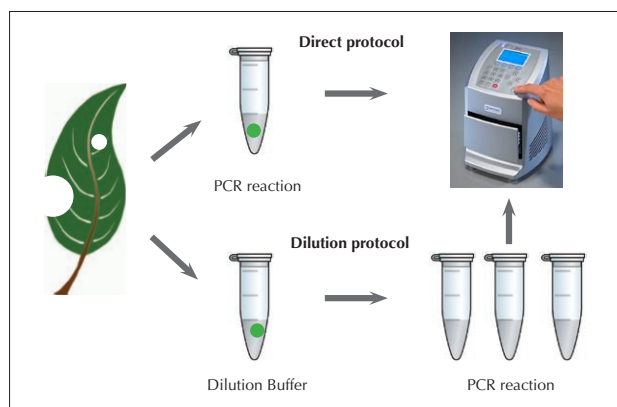


FINNZYMES

PCR directly from plants without prior DNA purification

Finnzymes' Phire® Plant Direct PCR Kit is designed to amplify DNA directly from plant samples. No DNA isolation is required prior to the PCR. The kit is based on Phire® Hot Start DNA Polymerase, a specially engineered enzyme with a unique DNA binding domain. Phire DNA Polymerase is extremely robust and tolerant of many PCR inhibitors present in plant material. The kit includes a complete set of optimized reagents, sampling tools and control primers making it an easy and convenient choice for amplification of plant DNA. When combined with Finnzymes' Piko® Thermal Cycler and UTW® vessels, PCR protocols can be completed in as little as 30 minutes.

Two short protocols for various needs



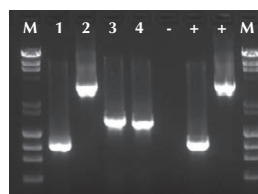
Two alternative protocols for different purposes. In the direct protocol, a small piece of plant material is placed directly in the PCR reaction mix. In the dilution protocol, a small volume of the Dilution Buffer containing crushed plant material is added in the PCR reaction mix. The dilution protocol is used for long or difficult amplicons, and for assays where several DNA fragments are amplified from the same sample.

Advantages

- No need for DNA extraction
- Phire Hot Start DNA Polymerase features high inhibitor tolerance and allows specificity with abundant yields
- Fast and simple protocols require minimal hands-on time
- Convenient sampling tools included in the kit
- Only very little sample material required
- Tested with leaves and seeds from a wide variety of plant species (see www.finnzymes.com/directpcr)

Easy, fast and reliable PCR

A) Leaves



1: *Arabidopsis*, mtDNA (1 kb)
2: *Arabidopsis*, gDNA (3.5 kb)
3: *Capsicum*, mtDNA (1.4 kb)
4: Maize, mtDNA (1.4 kb)

B) Seeds



mtDNA (~ 1.4 kb, depending on the species)

Phire Plant Direct PCR Kit allows efficient PCR from various plant leaves and seeds. Small samples from different leaves (A) or seeds (B) were placed into 50 or 20 µl PCR reactions, respectively. Various amplicons from mitochondrial or genomic DNA were successfully amplified with the Phire Plant Direct PCR Kit. Piko Thermal Cycler and UTW reaction vessels were used in PCR. + and - denote control reactions with or without purified DNA.

Ordering information

Phire® Plant Direct PCR Kit	
F-130	200 reactions (50 µl each)

Finnzymes' Direct PCR allows amplification of DNA directly from various starting materials such as blood, mouse ear and tail tissues, plants, and FFPE tissue samples. For more information about the Direct PCR products and protocols, please visit www.finnzymes.com/directpcr