KiaDirect™ Plant Tissue PCR Kit

Cat. No. AD301
Storage: *2X KiaDirect*™ PCR SuperMix (+dye) at *-20°C* for two years; others at room temperature (15-25°C) for two years.

Description

KiaDirect Plant Tissue PCR Kit uses a unique lysis buffer to lyse plant tissues (fresh or frozen). Resulting lysate without purification can be directly used as template for PCR amplification. 2X PCR SuperMix (+dye) is highly resistant to various PCR inhibitors present in plant tissues. PCR product can be directly used for gel electrophoresis. It is recommended to store

Advantages

- Direct amplification from unpurified lysate. Suitable for high-throughput screening.
- Amplification of genomic DNA fragment up to 2 kb

Applications

Plants without high content of polysaccharides or polyphenols

Kit Contents

Component	AD301-01	AD301-02
PDI Buffer	4ml	20ml
PD2 Buffer	4ml	20ml
2X KiaDirect ™ PCR SuperMix (+dye)	1ml	5x1 ml
ddHp	5 ml	25 ml

Please prepare 95°C water bath or heater. If a white precipitate appears, dissolve it by heating at 55°C before us

Genomic DNA Extraction

- Cut 5 mg or 0.5 cm^2 plant tissues and add it to a tube containing 4 µL of PD1 buffer, vortex.
- Incubate at *95°C* for 10 minutes (for plant tissue hard to be lysed, suggest to cubate at 95°C for 30 minutes).
- Add 40 µL of PD2 Buffer and vortex to mix. The lysate can be used as PCR template or stored at 4°C for three months or at -20°C for six months.

Reaction Components

Component	Volume	Final Concentration
Tissue Extract	2-4 µL	as required
Forward Primer (10 µlM)	0.4 µL	0.2 µlM
Reverse Primer (10 µlM)	0.4 µL	0.2 µlM
2xKiaDirect™ PCR SuperMix (+dye)	10 µL	lx
ddHp	Variable	-
Total volume	20 µL	-

Thermal cycling conditions

94°C	5-10 min	
94°C	30 sec	30-40 cycles
50-60°C	30 sec	
72°C	1-2 kb/min	
72°C	5-10 min	

FOR RESEARCH USE ONLY

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Notes

- Quickly secure the cap of tube for PD1 buffer after use to avoid pH change.
- Avoid repeated freezing and thawing of samples
- Completely thaw the contents in the tube and mix well before use.
- For plant tissues hard to be lysed (e.g. waxy leaves), increase the incubation time at 95°C up to 30 minu
- If faint bands are observed, increase the quantity of template used or increase the number of PCR cycles (no more than 40 cycles).
  If non-specific amplification bands are observed, adjust the annealing temperature or properly reduce the quantity of template used.
- The extracts can be stored at 4°C for three months or at -20°C for six months.

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