DATA SHEET

Jena Bioscience

Plant DNA Preparation - Solution Kit

Solution based genomic DNA purification from plant tissue

Cat. No.	Amount
PP-207S	100 preparations
PP-207L	5x 100 preparations

For general laboratory use.

Shipping: shipped at ambient temperature

Storage Conditions: store at ambient temperature

Shelf Life: 12 months

Description:
Plant DNA Preparation Kit is designed for convenient and fast isolation of genomic DNA from plant tissue. The solution based system minimizes DNA fragmentation that may be problematic in other spin-column/filtration based method. Because phenol or chloroform is not used it is safe and does not produce any harmful waste.
Solution based genomic DNA purification kits guarantee minimal DNA fragmentation and yield DNA sized up to 150 kb.

Expected yield:
Yields of genomic DNA will vary from sample to sample depending on the amount, quality and type of material processed. An amount of approx. 0.25 µg purified DNA per preparation can be expected.

Content:
Cell Lysis Solution
RNase A (before use, solve in double distilled water to obtain a final concentration of 4 mg/ml) - store at -20 °C
Protein Precipitation Solution
Washing Buffer (before use, add 96-99 % Ethanol as indicated on the bottle)
DNA Hydration Solution

To be provided by you:
Isopropanol (2-propanol) >99 %
96-99 % Ethanol
Microtubes 1.5 ml

Preparation procedure:
Before start, provide >99 % Isopropanol (2-propanol) (not included in the kit).
For S pack (100 preps): Add 200 µl dd-water to the RNase A tube and 48 ml 96-99 % Ethanol (not included in the kit) to the Washing Buffer bottle.

Buffer	**PP-207S** 100 preps
Cell Lysis Solution	32 ml
RNase A (4 mg/ml)	0.8 mg
Protein Precipitation Solution	11 ml
Washing Buffer	add 48 ml Ethanol (final volume 60 ml)
DNA Hydration Solution	11 ml

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1 Sample collection and Handling:

- Fresh or frozen tissue may be finely ground with a mortar and pestle in liquid nitrogen prior to DNA isolation.
- Work quickly and keep tissue cold to minimize DNase activity.

2 Cell Lysis:

- Transfer the finely ground tissue (10-30 mg) to a 1.5 ml micro-tube.
- Add 300 µl Cell Lysis Solution to the tissue.
- Incubate at 65 °C for 60 min.
- Invert the tube occasionally during the incubation.

3 RNase Treatment:

- Add 1.5 µl of RNase A Solution to the cell lysate.
- Mix the sample by inverting the tube 25 times and incubate at 37 °C for 15-60 min.

4 Protein Precipitation:

- Cool the sample to room temperature and add 100 µl of Protein Precipitation Solution to the cell lysate.
- Mix the solution well by vortexing.
- Centrifuge at 15,000 g for 3 min. (The precipitant should form a tight, green pellet. If the pellet is not tight, repeat mixing, incubate on ice for 10 minutes, and then centrifuge again.)

5 DNA Precipitation:

- Transfer the DNA containing supernatant to a clean 1.5 ml microtube containing 300 µl of Isopropanol >99 %.
- Mix the sample by inverting gently 50 times.
- Centrifuge at 15,000 g for 1 min. The DNA will be visible as a pellet that ranges in color form off-white to light green.
- Discard the supernatant and drain tube briefly on clean absorbent paper.
- Add 500 µl Washing Buffer and invert tube several times to wash the DNA Pellet.
- Centrifuge at 15,000 g for 1 min.
- Discard the ethanol carefully.
- Air dry at room temperature for 10-15 min.

6 DNA Hydration:

- Add 50-100 µl of DNA Hydration Solution to the dried DNA pellet.
- Hydrate the DNA by incubating sample at 65 °C for 60 min.
- Store DNA at 4 °C. For long time storage, place sample at -20 °C or -80 °C.