

Animal and Fungi DNA Preparation Kit

Genomic DNA purification from animal tissue and fungi

DNA Preparation Kit

Cat.-No.	Amount
PP-208	400 preparations

For *in vitro* use only
 Quality guaranteed for 12 months
 Store at room temperature

Kit contents

Cell Lysis Solution

Proteinase K (before use solve in water to a final concentration of 20 mg/ml)

RNase A (before use solve in water to a final concentration of 4 mg/ml)

Protein Precipitation Solution

DNA Hydration Solution

To be provided by you

Isopropanol (2-propanol) >99%

Ethanol 80%

Microtubes 1.5 ml

Description

Animal and Fungi DNA Preparation Kit is designed for convenient and fast isolation of genomic DNA from animal tissue and fungi. 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.

Preparation procedure

Before start, provide >99% Isopropanol (2-propanol) and 80% Ethanol (both not included in the kit).

Solve the *Proteinase K* and *RNase lyophilisates* in dd-water as indicated on each bottle. *Proteinase K Solution* and *RNase A Solution* should be stored at 4°C.

1. Cell Lysis

- Place 5 mm (5-10 mg) fresh or frozen tissue into a 1.5 ml microtube.
- Add 300 µl *Cell Lysis Solution* to the tissue.
- Add 1.5 µl *Proteinase K Solution* to the lysate and mix by inverting several times.
- Incubate at 55°C overnight or until tissue has dissolved.

2. RNase Treatment

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

3. 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 precipitated proteins will form a tight pellet. If the pellet is not tight, repeat mixing, incubate on ice for 10 minutes, and then centrifuge again.)

4. DNA Precipitation

- Pour the supernatant containing DNA into a clean 1.5 ml tube 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 from off-white to light green.
- Pour off supernatant and drain the tube briefly on clean absorbent paper.
- Add 300 µl *Ethanol 80%* and invert tube several times to wash the DNA pellet.
- Centrifuge at 15,000 g for 1 min. Pour off the ethanol carefully.
- Invert and drain the tube on clean absorbent paper and allow to air dry for 10-15 min.

5. DNA Hydration

- Add 50 µl of *DNA Hydration Solution* to the dried DNA pellet.
- Hydrate the DNA by incubating sample for 1 h at 65°C.
- Store DNA at 4°C. For long time storage, place sample at -20°C or -80°C.