

Yeast DNA Preparation Kit

Genomic DNA purification from yeast

DNA Preparation Kit

Cat.-No.	Amount
PP-209	400 preparations

For *in vitro* use only

Quality guaranteed for 12 months

Store at room temperature, for long term storage place the Lyticase lyophilisate at 4°C

Lyticase solution should be stored at -20°C

RNase solution should be stored at 4°C

Kit contents

Cell Resuspension Solution

Lyticase (before use solve in *Cell Resuspension Solution* to a final concentration of 2.5 units/ μ l)

Cell Lysis Solution

Protein Precipitation Solution

DNA Hydration Solution

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

To be provided by you

Isopropanol (2-propanol) >99%

Ethanol 80%

Microtubes 1.5 ml

Description

Yeast DNA Preparation Kit is designed for convenient and fast isolation of genomic DNA from yeast cells. 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 *Lyticase* lyophilisate in *Cell Resuspension Solution* and the *RNase* lyophilisate in dd-water as indicated on the respective bottles. *Lyticase Solution* should be stored at -20°C, *RNase A Solution* should be stored at 4°C.

1. Cell Lysis

- Transfer 1 ml of cultured cells into a 1.5 ml tube.
- Harvest the cells by centrifuging at 15,000 g for 1 min and discard the supernatant.
- Resuspend the cell pellet in 300 μ l of *Cell Resuspension Solution*.
- Add 1 μ l of *Lyticase Solution* and mix by inverting approx. 25 times.
- Place the tube at 37°C for 30-60 min.
- Centrifuge at 15,000 g for 1 min and discard the supernatant.
- Resuspend the pellet in 300 μ l of *Cell Lysis Solution*.

2. Protein Precipitation

- Add 100 μ l of *Protein Precipitation Solution* and vortex vigorously for 20-30 sec.
- Centrifuge at 15,000 g for 5 min.

3. DNA Precipitation

- Pour the supernatant into a clean 1.5 ml microtube containing 300 μ l *Isopropanol* >99%.
- Mix the sample by inverting gently 50 times.
- Centrifuge at 15,000 g for 1 min. (DNA should be visible as a small white pellet.)
- Pour off supernatant and drain tube briefly on clean absorbent paper. Add 300 μ l Ethanol 80% and invert the 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.

4. DNA Hydration

- Add 50 μ l of *DNA Hydration Solution* to the dried DNA pellet.
- Add 1.5 μ l of *RNase A Solution* and incubate at 37°C for 30 min.
- Hydrate the DNA by incubating for 1 h at 65°C.
- Store the DNA at 4°C. For long time storage, place sample at -20°C or -80°C.