

Yeast DNA Preparation Kit

DNA purification from yeast

Solution based genomic DNA Preparation Kit

	Cat.-No.	Amount
	PP-209XS	20 preparations
	PP-209S	100 preparations
	PP-209L	500 preparations

For *in vitro* use only.

Quality guaranteed for 12 months.

Store at room temperature.

For long term storage place *Lyticase* and *RNase A* lyophilisates at -20°C.

Lyticase and *RNase A* Solutions should be stored at -20°C.

Kit contents

Cell Resuspension Solution

Lyticase (before use, solve in *Lyticase Suspension Solution* to obtain a final concentration of 2.5 units/ μ l)

Lyticase Suspension Solution

Cell Lysis Solution

Protein Precipitation Solution

Washing Buffer (before use, add 96-99% Ethanol as indicated on the bottle)

DNA Hydration Solution

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

To be provided by you

Isopropanol (2-propanol) >99%

96-99% Ethanol

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.

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. 10 μ g purified DNA per preparation can be expected.

Buffer	PP-209XS	PP-209S	PP-209L
	20 preps	100 preps	500 preps
Cell Resuspension Solution	6.4 ml	32 ml	160 ml
<i>Lyticase</i> (final concentration 2.5 units/ml)	60 units (before use, solve in 24 μ l <i>Lyticase Suspension Solution</i>)	300 units (before use, solve in 120 μ l <i>Lyticase Suspension Solution</i>)	5 x 300 units (before use, solve each vial in 120 μ l <i>Lyticase Suspension Solution</i>)
<i>Lyticase</i> Suspension Solution	26 μ l	130 μ l	650 μ l
Cell Lysis Solution	6.4 ml	32 ml	160 ml
Protein Precipitation Solution	2.2 ml	11 ml	55 ml
Washing Buffer	add 9.6 ml Ethanol (final volume 12 ml)	add 48 ml Ethanol (final volume 60 ml)	add 120 ml Ethanol to each bottle (final volume 150 ml each)
DNA Hydration Solution	2.2 ml	11 ml	55 ml
<i>RNase A</i>	0.16 mg (before use, solve in 40 μ l dd-water to obtain a final concentration of 4 mg/ml)	0.8 mg (before use, solve in 200 μ l dd-water to obtain a final concentration of 4 mg/ml)	5 x 0.8 mg (before use, solve each vial in 200 μ l dd-water to obtain a final concentration of 4 mg/ml)

Yeast DNA Preparation Kit

DNA purification from yeast

Solution based genomic DNA Preparation Kit

Preparation procedure

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

For XS pack (20 preps): Add 24 µl *Lyticase Suspension Solution* to the *Lyticase* tube, 40 µl dd-water to the *RNase A* tube and 9.6 ml 96-99% Ethanol (not included in the kit) to the *Washing Buffer* bottle.

For S pack (100 preps): Add 120 µl *Lyticase Suspension Solution* to the *Lyticase* tube, 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.

For L pack (500 preps): Add 120 µl *Lyticase Suspension Solution* to each *Lyticase* tube, 200 µl dd-water to each *RNase A* tube and 120 ml 96-99% Ethanol (not included in the kit) to each *Washing Buffer* bottle.

Lyticase and *RNase A Solutions* should be stored at -20°C.

1. Cell Lysis

- Transfer 1 ml of cultured cells into a 1.5 ml microtube
- Harvest the cells by centrifuging at 15,000 g for 1 min and discard the supernatant
- Resuspend the cell pellet in 300 µl of *Cell Resuspension Solution*
- Add 1 µl 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 µl of *Cell Lysis Solution*

2. Protein Precipitation

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

3. DNA Precipitation

- Pour the supernatant to a clean 1.5 ml microtube containing 300 µl *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)

- Discard the supernatant and drain tube briefly on clean absorbent paper. Add 500 µl *Washing Buffer* and invert the 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

4. DNA Hydration

- Add 50-100 µl of *DNA Hydration Solution* to the dried DNA pellet.
- Add 1.5 µl of *RNase A Solution* and incubate at 37°C for 30 min
- Hydrate the DNA by incubating for 60 min at 65°C
- Store the DNA at 4°C. For long time storage, place sample at -20°C or -80°C