Ver. 2411-01

PureHelix™ *Genomic* DNA Prep Kit [Yeast]

(Solution Type)

Kit Contents

PureHelix™ *Genomic* DNA Prep Kit [Yeast]		
Cat. No.	**GSY100** **(100 preps)**	**GSY400** **(400 preps)**
Cell Lysis Solution	30ml	60ml x 2ea
Cell Resuspension Solution	30ml	120ml
DNA Hydration Solution	10ml	40ml
Protein Precipitation Solution	10ml	40ml
WB	11ml **(Add 44ml ethanol)**	44ml **(Add 176ml ethanol)**
RNase A (4mg/ml)	0.2ml (Dry)	0.8ml (Dry)
Lyticase (2.5unit/ml)	0.12ml (Dry)	0.5ml (Dry)
Lyticase Suspension Solution	120µl	500µl
Instructions for Use	1ea	1ea

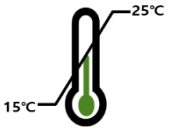
Description

PureHelix™ *Genomic* Prep Kit [Yeast] is designed for high-yield and high-quality isolation of genomic DNA from yeast cells. This solution based system minimizes DNA fragmentation that may be problematic in spin-column/filtration based methods. Because phenol or chloroform is not used it is safe and does not produce any harmful waste. DNA purified with this kit is suitable for a variety of applications, including PCR amplification, digestion with restriction endonucleases and membrane hybridizations.

Applications

Genome sequencing
Southern blot analysis
PCR, quantitative real-time PCR

Storage



Room temperature

Shelf life

12 months

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Quality Control

Each lot of **PureHelix™ *Genomic* Prep Kit [Yeast]** was tested against predetermined specifications to ensure consistent product quality.

Protocol

Important things to do before starting

- Prepare **Isopropanol** (2-propanol) **(not included in this kit)**.
- Before using **WB**, add **absolute ethanol** according to the bottle label to obtain a working solution. You may use 80% ethanol, instead of WB. Absolute ethanol does not supplied in this kit.
- **For 100 Prep Kit (GSY100)**
  Add **0.2 ml** of distilled water into the **RNase A tube** to make 4mg/ml concentration, and then store at -20℃.
  Add **0.12 ml** of **Lyticase suspension solution** into the **Lyticase tube** to make 2.5unit/μl concentration, and then store at -20℃.
- **For 400 Prep Kit (GSY400)**
  Add **0.8 ml** of distilled water into the **RNase A tube** to make 4mg/ml concentration, and then store at -20℃.
  Add **0.5 ml** of **Lyticase suspension solution** into the **Lyticase tube** to make 2.5unit/μl concentration, and then store at -20℃.

Cell Lysis

1. Transfer 1 ml of the cultured cells into a 1.5 ml microcentrifuge tube.
2. Harvest the cells by centrifuging at 12,000 rpm for 1 min, and discard the supernatant.
3. Resuspend the cell pellet in **300 μl** of **Cell Resuspension Solution**.
4. Add **1 μl** of **Lyticase (2.5units/μl)** and mix by inverting approx. 25 times.
5. Place the tube at 37℃ for 30-60 min.
6. Centrifuge at 12,000 rpm for 1 min, and discard the supernatant.
7. Resuspend the pellet in **300 μl** of **Cell Lysis Solution**.

Protein Precipitation

8. Add **100 μl** of **Protein Precipitation Solution**, and vortex briefly.
9. Centrifuge at 12,000 rpm for 5 min.

DNA Precipitation

10. Transfer the supernatant to a clean 1.5 ml microcentrifuge tube containing **300 μl** of **Isopropanol** (2-propanol), and mix the sample by inverting gently 50 times.
11. Centrifuge at 12,000 rpm for 1 min. Discard the supernatant and drain the tube briefly on clean absorbent paper.
    ※ DNA should be visible as a small white pellet.

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12. Add **500 µl** of **WB (80% ethanol)** and invert the tube several times to wash the DNA pellet.
13. Centrifuge at 12,000 rpm for 1 min. Discard the ethanol carefully and air dry at room temperature for 10 min.

※ The DNA pellet is very loose at this point and care must be taken to avoid missing the pellet. Ethanol should be completely removed, but DNA is very difficult to redissolve when over-dried.

DNA Hydration

14. Add **20-100 µl** of **DNA Hydration Solution** to the dried DNA pellet.
15. Add **1.5 µl** of **RNase A (4mg/ml).** Mix by inverting and incubate at 37℃ for 30 min.
16. Hydrate the DNA by incubating at 65℃ for 30 min. Store the DNA at 4℃.

※ For long time storage, Place the sample at -20℃ or -80℃.

Products

Cat. No.	Products	Size
GSY100	PureHelix™ *Genomic* Prep Kit [Yeast] (Solution Type)	100preps
GSY400	PureHelix™ *Genomic* Prep Kit [Yeast] (Solution Type)	400preps

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