

**Product Information:****Fast Yeast Genomic DNA extraction Kit****Catalog:** YD-001**Sizes:** 50 extractions**Storage:** 2-8°C**Kit contains:** Reagent-A (10ml); Reagent-B (250ul); Reagent-C (10ml); DNA Precipitation Solution (10ml), Glass Beads (Acid washed);**Description:** This kit is designed for rapidly isolating the genomic DNA from the rigid cells/tissue samples (yeast, fungi and bacteria) offering a simple, fast, environmental-friendly protocol for gDNA extraction without using vacuum filtration and toxic organic solvents such as β -mercaptoethanol, phenol or chloroform.**Procedure:**

1. Transfer 1.5 mL of liquid culture of yeast (approximately 2-10x 10⁷ cells) into a clean 1.5mL microcentrifuge tube. Centrifuge at 3,000 xg for 5 minutes. Discard the supernatant.
2. Add 200ul reagent-A and 5ul reagent-B into the pellet tube. Incubate at -80°C or dry ice for 3 minutes.
3. Place the tube in a PCR machine (or water bath or block) and incubate at 95°C for 2 minutes.
4. Add an equal volume of glass beads into the tube, vortex vigorously for 30 seconds.
5. Incubate at -80°C or dry ice for 3 minutes, then at 95°C for 2 minutes. Vortex vigorously for 30 seconds.
6. Centrifuge at 12,000 xg for 2 minutes at 4°C and transfer the supernatant into a clean 1.5mL tube.
7. Add 200ul reagent-C into the lysate supernatant and mix by pipette up and down several times.
8. Pipette 5-10ul lysates into a 25ul PCR mastermix and run PCR/Real-Time PCR at thermal cyclers.

Procedure: (optional) for concentrating genomic DNA

- Centrifuge the lysate solution from step 7 at 5,000 xg for 5 minutes at 4°C and transfer the supernatant into a clean 1.5ml microcentrifuge tube.
- Add 200ul DNA precipitation solution (Cat.#: PS-01D) into the supernatant. Mix well by pipette up and down several times and centrifuge at 12,000 xg for 10 minutes at 4°C. Discard the supernatant.
- Simply rinse pellet with 80% ethanol for 3 times (don't resuspend the DNA pellets).
- Air-dry pellet for 5-10 minutes and dissolve DNA in 50ul TE buffer or distilled water.
- Centrifuge at 12,000 xg for 3 minutes at 4°C prior to measure the DNA concentration with 260/280nm. Store DNA at -20°C.
- Pipette 2-5ul of DNA into a 25ul PCR master mixture and run PCR/Real-Time PCR at thermal cyclers.

Precautions and Disclaimer:

This product and procedure described are intended for R&D use only. Purchase of this product does not convey a license to perform any patented process.

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