

Product information

Fungal (Yeast) Genomic DNA Extraction Kit

Catalog #: FT71415
Size: 50 preps
Storage: -4°C (12 months)

Description:

The kit provides a simple and efficient method for total DNA isolation from fungal species. Total DNA includes genomic DNA, mitochondrial DNA. Molecular size of genomic DNA purified by this procedure is around 20-50 kb. Average DNA yield is 2-10 ug per ml of overnight fungi culture. Purified DNA can be readily used in a number of downstream applications including real time PCR analysis, SNP analysis, restriction enzyme digestion, hybridization and other applications.

Contents:

Kit Components	QTY
Universal Digestion Buffer	25 ml
Universal Buffer PF	12 ml
TE Buffer	10 ml
Protocol	1 pc

Features:

- Rapid and simple.
- High quality of DNA. OD₂₆₀/OD₂₈₀ of purified DNA is generally 1.8~1.9.
- Non toxic. The kit does not contain toxic reagents.
- Easy to scale up.

Procedure:

1. Grind 100-500 mg (wet weight) mycelia/spores or cell pellets collected from centrifugation of 0.1~3 ml fungi culture in liquid nitrogen using a pestle. Transfer the grounded sample to a clean 1.5 ml microcentrifuge tube. .
2. Pre-warm Universal Digestion at 65 °C. Add 400 µl of the Universal Digestion to the sample. Mix well by inverting the tube > 5 times.

Note: Universal Digestion Buffer may form precipitates during long-term storage. Warm the bottle at 65 °C to dissolve the precipitates.

3. Incubate at 65°C for 10 to 30 minutes with occasional mixing.

Note: To obtain RNA-free DNA, add 20 µl RNase A solution (20 mg/ml) to the tube, mix thoroughly and incubate at room temperature for 5 minutes before proceeding to step 4.

4. Add 200 µl Universal Buffer PF. Mix gently by inverting the tube several times. Incubate at -20°C for 5 minutes.
5. Centrifuge at 12,000 x g for 5 minutes at room temperature. Transfer the supernatant to a new clean 1.5 ml tube.

Procedure Continued:

- 6. (Optional)** Add 0.2 ml of chloroform to the supernatant, mix well by inverting 10 times. Centrifuge at 12,000 x g for 2 minutes. Carefully transfer the supernatant to a clean 1.5 ml tube.
 - 7.** Add equal volume of isopropanol (approx 0.3~0.5 ml) to the solution and mix well. Incubate at room temperature for 2~5 minutes. Centrifuge at 12,000 x g for 5 minutes, discard the supernatant carefully.
 - 8.** Add 1 ml of pre-cooled 75% ethanol to the tube, mix well by inverting 10 times. Centrifuge at 12,000 x g for 1 minute, discard the supernatant.
 - 9.** Repeat the Step **8**.
 - 10.** Air-dry the pellet at room temperature with the lid open for 2~5 minutes.
- Note:** Do not over dry.
- 11.** Add 50~200 μ l of TE buffer to dissolve DNA pellet. It may be necessary to pipette up and down to completely dissolve DNA. Purified DNA is ready for use. For long term storage, keep DNA at -20 °C.



PRODUCTS ARE INTENDED FOR BASIC SCIENTIFIC RESEARCH ONLY.
NOT INTENDED FOR HUMAN OR ANIMAL USE.