RUO

REF	G2MBR4-0810	50 Tests
	G2MBR4-0813	250 Tests

SPINXT

Fungal DNA Extraction Kit

Intended Use

The SpiNXT Fungal DNA Extraction Kit is intended for extraction of genomic DNA (gDNA) from Yeast cells, mycelium or variety of fungal species/tissues. This kit is intended to be used by researchers only.

Intended User

SpiNXT Fungal DNA Extraction Kit is intended for research use only.

Test Principle

The isolation and purification of DNA is based on silica membrane based spin column technology. The protocol begins with lysis of the sample using lysis buffer-1 followed by treatment with RNase A to extract RNA free genomic DNA. Lysis buffer 2 is then added to the sample followed by vigorous vortexing and incubation at 65 °C. After that, samples are subjected to heat shock treatment in the presence of detergents. After incubating the sample on ice for 15 min, it is spun in the filter column to remove any debris after which isopropanol is added to the clear lysate which is then loaded onto the spin column. The DNA bound to the silica membrane is then washed with the provided wash buffers in order to remove any remaining impurities, and the purified DNA is eluted using Buffer AE.

Summary

The SpiNXT Fungal DNA Extraction Kit is designed for the efficient isolation and purification of genomic DNA (gDNA) from Yeast cells, mycelium or variety of fungal species/tissues. The purified genomic DNA is compatible with various downstream applications such as PCR, restriction digestion, and sequencing. Yields typically may vary depending upon the cell density of the yeast, fungal tissue/species or culture. The kit is based on the silica membrane-based technology in a convenient spin column format allowing easy extraction of high-quality purified fungal DNA.

Storage, Operating Conditions and Stability

- The kit has a shelf life of 18 months from the date of manufacturing.
- The test kit and its component are stable until the expiration date mentioned on the kit box.
- All the kit components is shipped and stored at 15°C to 25°C.

*RNase A must be stored at -20°C.

Reagents Provided
Table 1a. (For 50 Tests)

Kit Contents	Kit Content Code	Kit Content Quantity G2MBR4-0810
Buffer LBF-1	G2MBR3-1868-1	1 X 25 ml
Buffer LBF-2	G2MBR3-1869-1	1 X 8 ml
RNase A (10 mg/ml)	G2MBR3-1870-1	1 X 600 µl
Buffer W1	G2MBR3-1871-1	1 X 20 ml
Buffer W2	G2MBR3-1872-1	1 X 20 ml
Buffer AE	G2MBR3-1873-1	1 X 10 ml

Consumables Provided
Table 1b. (For 50 Tests)

Kit Contents	Kit Content Quantity G2MBR4-0810
Mini Column	1 X 50 Nos.
Collection Tube	1 X 50 Nos.

Reagents Provided
Table 2a. (For 250 Tests)

Kit Contents	Kit Content Code	Kit Content Quantity G2MBR4-0813
Buffer LBF-1	G2MBR3-1868-2	1 X 110 ml
Buffer LBF-2	G2MBR3-1869-2	1 X 40 ml
RNase A (10 mg/ml)	G2MBR3-1870-2	1 X 3 ml
Buffer W1	G2MBR3-1871-2	1 X 90 ml
Buffer W2	G2MBR3-1872-2	2 X 45 ml
Buffer AE	G2MBR3-1873-2	1 X 30 ml

Consumables Provided
Table 2b. (For 250 Tests)

Kit Contents	Kit Content Quantity G2MBR4-0813
Mini Column	2 X 125 Nos.
Collection Tube	2 X 125 Nos.

Materials Required but Not Provided

- Water bath or Heat block
- Micropipettes (Adjustable)
- Disposable barrier (Filter) pipette tips
- 1.5 ml microcentrifuge tubes (RNase and DNase free)
- Table top microcentrifuge
- Molecular biology grade ethanol (96-100%)
- Personal protective equipment (Aprons, disposable gloves, goggles etc).

⚠ Instructions Before Use

- Preheat a water bath or heating block at 65°C.
- Buffer W1 and Buffer W2 are supplied as concentrates. Before using for the first time, add the appropriate volume of molecular biology grade ethanol (96–100%) as indicated on the bottle and shake vigorously. Buffer W1 and Buffer W2 are stable for at least one year after the addition of ethanol when stored tightly closed at room temperature (15–25°C).

Protocol

1) Take about 50 mg of sample in a mortar and pestle and in case of liquid sample take 200 µl & add 400 µl of Buffer LBF-1. Homogenize the sample thoroughly.

2) Transfer the whole lysate into a 1.5 ml microcentrifuge tube. Add 12 µl of RNase A (10 mg/ml) and incubate it in water bath at 65°C for 15-20 min.

3) Further, add 130 µl of Buffer LBF-2 into the lysate and then vortex vigorously for 30 sec to 1 min at its maximum speed to enhance the lysis and incubate it at -20°C for 10 min.

4) Centrifuge the sample at 4°C for 15 min at 13000x*g*. Transfer the supernatant to a fresh 1.5 ml micro centrifuge tube and add equal volume of isopropanol to the solution. Mix by inverting 2-3 times and incubate it at -20°C for 10 min.

5) Pipette transfer the mixture into the Mini Column and centrifuge it at 10,000x*g* for 1 min. Discard the collection tube with flow-through.

6) Place the Mini Column into a fresh Collection Tube (2 ml) and add 500 µl Buffer W1. Centrifuge for 1 min at 10,000x*g*. Discard the flow-through.

7) Place the Mini Column back into the collection Tube (2 ml) and add 500 µl Buffer W2. Centrifuge for 1 min at 10,000x*g*. Discard the flow-through.

8) Repeat step 7.

9) Dry spin: Centrifuge the tube for one more time at full speed or 20,000x*g* for 2 min.

10) Place the column into a fresh 1.5 ml microcentrifuge tube and apply 30-50 µl Buffer AE (pre-warmed at 50°C) directly to the center of the spin column. Incubate at room temperature (15-25°C) for 3-5 min. Centrifuge at 10,000x*g* for 1min.

11) Store the purified DNA at -20°C for long-term storage.

Symbols for Use in the Labeling	
Symbols	**Definition**
	KEEP AWAY FROM SUNLIGHT
	TEMPERATURE LIMIT
	RESEARCH USE ONLY
	UPWARD
	CONSULT INSTRUCTIONS FOR USE
	BATCH CODE
	CATALOGUE NUMBER
	USE BY DATE
	DATE OF MANUFACTURE
	MANUFACTURER
	CONTAINS SUFFICIENT FOR <n> TESTS
	CAUTION
	DO NOT USE IF PACKAGE IS DAMAGED

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