BIO BASIC
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Product information

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Rapid Animal Genomic DNA Isolation Kit

Catalog #: At4780 / AT4781 / AT4782
Size: 10 preps / 50 preps / 250 preps
Storage: Transportation at ambient temperature. Upon receipt, store at room temperature, valid for 1 year.

Product Description

The kit is designed for rapid small-scale extraction of high quality genomic DNA from a variety of fresh or frozen animal cells and tissues. Purified DNA can be used for many downstream applications such as PCR, restriction digestion, hybridization and other applications.

Features

- Rapid & 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.

Components

Components	AT4780, 10 Preps	AT4781, 50 Preps	AT4782, 250 Preps
Universal Digestion Buffer	5 ml	24 ml	120 ml
Buffer PA	3 ml	12 ml	60 ml
TE Buffer	2 ml	10 ml	50 ml
Protocol	1	1	1

Procedure

1. Pre-warm Universal Digestion Buffer at 65°C.
Note: Universal Digestion Buffer may form precipitates during long-term storage, warm the bottle at 65°C.
2. Grind 25~50 mg animal tissue to fine powder in liquid nitrogen. Transfer the powder into a 1.5 ml tube. Add 400 µl Universal Digestion Buffer; incubate at 65°C for 1 hour.
Note 1: Alternatively, homogenize 25~50 mg tissue in 400 µl Digestion Buffer using a pestle or homogenizer.
Note 2: To obtain RNA-free DNA, add 20 µl RNase A solution (20 mg/ml) (not provided in the kit) to the tube. Mix thoroughly and incubate at 65°C for 5 minutes.
3. Add 200 µl Buffer PA, mix by inverting the tubes several times. Incubate at -20°C for 5 minutes.
4. Centrifuge at 12,000 x g for 5 minutes at room temperature. Transfer the supernatant to a new 1.5 ml tube.
5. (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.
6. Add equal volume of isopropanol (approx 0.3~0.5 ml) to the solution, mix well by inverting the tube 5 times. Incubate at room temperature for 2~5 minutes. Centrifuge at 12,000 x g for 5 minutes, discard the supernatant carefully.
7. 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.
8. Repeat the Step 7 once.
9. Air-dry the pellet at room temperature with the lid open for 2~5 minutes.
10. Add 50~200 µl of TE buffer to dissolve DNA pellet. Keep at 4°C for a couple hours until DNA pellet is completely dissolved. Purified DNA is ready for use. For long term storage, store at -20°C.

