

Fecal Genomic DNA Extraction Kit

Cat No.: D2700

Package: 50T/100T

Storage: Keep it at room temperature, and the reinspection period is one year. (Note: RNase A, proteinase K is shipped as an accessory and stored at -20°C)

Component	50T	100T	Storage
RNase A	100μL	100μL×2	-20°C
Protease K	1mL	1mL×2	-20°C
Solution A: Preservative Fluid	50mL	100mL	RT
Solution B: Lysate	40mL	80mL	RT
Solution C: Buffer	40mL	80mL	RT
Wash Buffer I	18mL	18mL×2	RT
Wash Buffer II	8mL	8mL×2	RT
Elution Buffer	5mL	10mL	RT
DNA Adsorption Column	50 units	100 units	RT
Instruction	1	1	

Note: Add absolute ethanol to the rinse solution I and II before use, and refer to the label on the bottle body. Provide your own absolute ethanol (add 12mL of absolute ethanol per bottle of rinse I, and 24mL of absolute ethanol per bottle of rinse II).

Product description:

This kit is suitable for the extraction of microbial DNA from various feces. The reagents contained in the kit have a good cracking effect on various bacteria and fungi in the feces, and retain the polymorphism of microbial DNA to the maximum extent.

The DNA extracted using this kit has a large yield and good integrity, and can be directly used in various routine operations, including enzyme digestion, PCR, library construction, Southern hybridization and other experiments.

Operation steps (for reference only):

1. Weigh 200mg of feces in a 2mL centrifuge tube, add 1mL of reagent A, reverse and mix well;
2. 70°C water bath for 20min, reverse and mix well for several times, centrifugation at 12000rpm for 5min, discard the supernatant;
3. Add 800μL reagent B resuspended, add 2μL RNase A, reverse and mix at room temperature for 15min; then add 20μL proteinase K, reverse and mix 65°C for 30min, mix several times, centrifuge at 12000rpm for 2min;
4. Transfer supernatant to a new 2mL centrifuge tube with 800μL of reagent C and mix well
 Note: If there is a suspended matter on the surface of the supernatant, try not to absorb it.
5. Transfer the mixture to the DNA adsorption column (put the adsorption column in the collecting tube), stand for 2min and centrifuge at 12000rpm for 1min;

Note: the adsorption column can add up to 800 μ L liquid at one time; if the mixture is more than 800 μ L, add the adsorption column twice.

6. Remove the waste liquid in the collection tube, put the adsorption column back into the collection tube and add 600 μ L rinse solution I, centrifugation at 12000rpm for 1min;
7. Remove the waste liquid in the collection tube, put the adsorption column back into the collection tube and add 600 μ L rinse solution II, centrifugation at 12000rpm for 1min;
8. Remove the waste liquid in the collection tube, put the adsorption column back into the collection tube, and then centrifuged at 12000rpm for 1min;
9. Take out the adsorption column and dry it at room temperature for 2min;
10. The adsorption column was placed into a new centrifuge tube, adding 50-100 μ L of eluate, let stand at room temperature for 5min and centrifuged at 12000rpm for 1min. In the centrifugal tube is the fecal microbial DNA solution.

Note:

1. Fresh fecal samples will get a higher yield, and different samples should consult the corresponding optimal preservation conditions before sampling.
2. The absorption of the sediment should be avoided from the supernatant, otherwise the adsorption column will be blocked and the product purity will be affected.
3. The volume of elution buffer should not be less than 50 μ L, affecting the recovery efficiency; it is recommended to use the elution buffer provided with the kit, and eluting with water; DNA should be kept at -20 $^{\circ}$ C to avoid repeated freezing and thawing to prevent degradation.
4. Liquid reagents to avoid contact with the skin, if accidental contact should be immediately washed with a lot of water.

Related products:

- D1010* 6 \times DNA Loading Buffer
- T1060* 50 \times TAE Buffer
- T1050* 5 \times TBE Buffer
- M1070* D2000 plus DNA Ladder
- M1400* 1kb DNA Ladder
- G8142* GoldView II Nucleic Acid Stain(5000 \times)