MaxExtraction Soil Genomic DNA Isolation Kit

Cat No.: B82

Package: 50rxns/ 100rxns

Storage: Store in dry and temperate condition(15℃-25℃), re-test period for 12 months. Storage at 2℃-8℃ for longer.

Kit Contents:

Component	B82-50rxns	B82-100rxns	Storage
Solution SA	30ml	60ml	RT
Solution SB	40ml	80ml	RT
Solution SC	5ml	10ml	RT
Solution SD	6ml	12ml	RT
Solution SE	35ml	70ml	RT
Washing Buffer 1	14ml	28ml	RT
Washing Buffer 2	7.5ml	15ml	RT
Grinding Beads	13g	26g	RT
Elution Buffer	2ml	4ml	RT
Adsorption Column	50 units	100 units	RT
Collection Tube	50 units	100 units	RT

Product Description

This kit is suitable for the extraction of microbial DNA from extreme soil environment like humus soil, cinnamon soil, silt, volcanic ash etc. With this kit, it has a good lysis performance to soil bacteria, fungi, which can maximize the retention of microbial DNA polymorphism.

With particular humus adsorption material it can be highly effective and specific removal of a variety of humus components and will not affect the yield of DNA. The purity is several times higher than that of phenol and chloroform extraction. The extracted DNA with high yield and good integrity, can be directly used for a variety of routine operations, including enzyme digestion, PCR, library construction, Southern Blotting etc.

Protocol

Adding Absolute Ethanol in Washing Buffer 1 and Washing Buffer 2 before use, adding volume please refer to the label on the bottle. All the centrifugation steps are using table centrifuge centrifugal at room temperature.

1. Weigh soil sample 0.25g into 2ml centrifuge tube, add 500µl Solution SA and vortex thoroughly.
2. Centrifuge at 12000rpm for 1min, remove supernatant.
3. Add 0.25g Grinding Beads, 720µl Solution SB, 80µl Solution SC to soil, vortex for 10min.
4. Centrifuge at 12000rpm for 1min, transfer 650µl supernatant to a new 2ml centrifuge tube.

MAX Precision Lab
Tel：(1)778-4888026 | Fax：(1) 250 346-2921
e-mail：info@maxprecisionlab.com Website：https://www.maxprecisionlab.com
Address: 30 N Gould St, STE 4000, Sheridan, WY 8280, U.S.A.

5. Add 100µl Solution SD and 700µl Solution SE.
6. Transfer above solution to Adsorption Column. Up to 700µl each time. Stand for 1min, centrifuge at 12000rpm for 1min.
7. Discard the flow-through liquid, add 500µl Washing Buffer 1(please check absolute ethanol has been added) to Adsorption Column.
8. Centrifuge at 12000rpm for 1min.
9. Discard the flow-through liquid, add 500µl Washing Buffer 2(please check absolute ethanol has been added) to Adsorption Column.
10. Centrifuge at 12000rpm for 1min.
11. Centrifuge the empty column at 12000rpm for 2min.
12. Take out the Adsorption Column, open the lid and dry at room temperature for 10min or dry 1min at 50℃.
13. Place the Adsorption Column into a new centrifuge tube, add 30µl Elution Buffer. Centrifuge at 12000rpm for 1min to get genomic DNA solution.

Notes

- Fresh soil samples will get a higher yield, and different samples should be consulted the best preservation conditions.
- If the precipitation appears, re-dissolved in 35℃ water bath before use and this does not affect the results.
- When transfer the supernatant, it should avoid the precipitation, otherwise it will block the adsorption column, and affect the purity of the product.
- The volume of the Elution Buffer should be no less than 50µl. It is recommended to use the elution buffer that comes with the kit, elute with water will affect elution efficiency. The DNA product should be kept at -20℃, avoid repeated freezing and thawing.
- If the product contains the residual humus, it will seriously affect the DNA absorption value. Electrophoretic detection and spectrophotometer detection are used for identification
- Liquid reagent should avoid contact with skin, in case of contact rinse immediately with water.

Related products

B22 DNA Loading Buffer 6×, 5mL

B92 TAE Buffer 50×, 500mL

C83 1kb DNA Ladder S

B66 MaxExtraction Plant Genomic DNA Extraction Kit

B6 Animal Tissues/Cells Genomic DNA Extraction Kit

B8 Blood Genomic DNA Extraction Kit (Spin column)