ab288105 – Soil Genomic DNA Kit

For rapid and reliable purification of high-quality genomic DNA from various soil samples.
For research use only - not intended for diagnostic use.

For overview, typical data and additional information please visit:
https://www.abcam.com/ab288105

Storage and Stability

All the reagents are shipped and stored at room temperature. Under these conditions, DNA has successfully been purified and used for PCR after 12 months of storage. During shipment, or storage in cool ambient conditions, precipitates may form in some buffers. It is possible to dissolve such deposits by incubation the solution at 65°C. DO NOT FREEZE!

Materials Supplied

Item	Quantity	Storage Condition
ezBind DNA Columns	50	RT
Soil Vial	50	RT
DH Reagent	12 mL	RT
Buffer LX	40 mL	RT
Buffer P2	15 mL	RT
Buffer BL	30 mL	RT
DNA Wash Buffer	10 mL	RT
Elution Buffer	20 mL	RT
RNase A	160 µL	RT

Materials Required, Not Supplied

These materials are not included in the kit, but will be required to successfully utilize this assay:

- Microcentrifuge capable of at least 13,000g
- Nuclease-free 1.5 mL or 2 mL microfuge tubes
- Water bath or heating block preset to 65°C and 70°C
- Absolute (96%-100%) ethanol
- Isopropanol (100%)

Reagent Preparation

- Preheat Buffer LX and Elution Buffer at 65°C. Make sure the crystal in Buffer LX is completely dissolved.
- Dilute DNA Wash Buffer by adding 40 mL of absolute ethanol to the bottle before use.

Δ Note: Buffer BL contains chaotropic salts that may form combustive compound with bleach. Use gloves and protective eye wear when handling this solution.

Assay Protocol

1. Add 0.25-0.5 g soil sample to a Soil Vial. Vortex briefly for 5 seconds. Add 70 µL Buffer LX. Vortex at maximum speed for 5 minutes until the sample is thoroughly homogenized.
2. Incubate at 70°C for 10 min, Mix sample twice during incubation by vortexing the tube.

Optional: for isolation of DNA from gram positive bacteria, do a second incubation at 95°C for 2 minutes. Spin the sample at 10,000 x g for 1 min. Transfer 500 µL of clear lysate to a 2 mL tube.

Δ Note: Make sure the soil vial rotates freely in your centrifuge without rubbing. Centrifuge tubes at 10,000g for 30 seconds at room temperature. CAUTION: Be sure not to exceed 10,000g.

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3. Add 250 µL Buffer P2, mix thoroughly by vortexing for 30 seconds. Incubate the sample on ice for 5 minutes.
4. Centrifuge the sample at 10,000g for 2 minutes. Carefully transfer around 600 µL of supernatant, avoiding the pellet, to a 1.5mL microfuge tube.
5. Add 250 µL of Buffer DH, mix well by vortexing for 5 seconds and incubate on ice for 5 minutes.
6. Centrifuge at 10,000g for 2 minutes at room temperature.
7. Transfer around 700 µL supernatant, avoid pellet, to a clean vial and add 575 µL of Buffer BL and 100 µL isopropanol. Mix well by vortexing for 5 seconds.
8. Transfer 700 µL of the sample to a mini column and spin at 10,000g for 30 seconds. Discard the flow through and reuse the collection tube. Process the remaining sample as described.
9. Add 700 µL of DNA Wash Buffer (add ethanol prior to use) to the column and spin at 10,000g for 30 seconds. Discard the flow through and put the column back to the collection tube.
10. Centrifuge the empty column at maximum speed for 2 min. Transfer the column to a 1.5 mL tube.
11. Add 50 µL of Elution Buffer directly onto the center of the matrix and incubate at 65°C for 5 minutes.
12. Centrifuge at 10,000g for 1 min to elute DNA.

Optional: Re apply the eluent to the column and spin at 10,000g for 1 min for a second elution.

Technical Support

For all technical or commercial enquiries please go to:
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www.abcam.co.jp/contactus (Japan)