AddPrep Soil Genomic DNA Extraction Kit

www.addbioinc.com www.addbio.net info@addbio.net

Product Code: 10056

Size: 100 preparations

Research Use Only

Store at Room Temp.

Description

AddPrep Soil Genomic DNA Extraction Kit offer simple, rapid and cost-effective method for isolating genomic DNA from variable microorganisms such as bacteria including gram (+) bacteria such as Bacillus spp., fungi, actinomycetes, algae and archaea in soil sample. The yield of genomic DNA extracted from 100 mg ~ 500 mg of soil is up to 20 µg. The genomic DNA extraction is based on spin column method with special buffers and without any solvents for a genomic DNA extraction. The extracted genomic DNA can be adjusted in variable applications, such as molecular biology experiments including PCR, blotting, metagenome analysis and so on.

Kit Components

Solution & Material	Size	Remarks
Spin column	100 ea	with collection tube
Lysis	55 ml	
Precipitation	22 ml	
Binding	32 ml	
Washing 1	30 ml	**Add Ethanol 22.5 ml before use**
Washing 2	12 ml	**Add Ethanol 48 ml before use**
Elution	25 ml	
Lysozyme Buffer	55 ml	
Lysozyme Sol.	1.2 ml X 2 tubes	50 mg/ml
Proteinase K Sol.	1.2 ml X 2 tubes	20 mg/ml

Storage and Stability

AddPrep Soil Genomic DNA Extraction Kit is stable for 3 years when stored in a constant temperature 15 ~ 35℃.

Before You Begin

1. Add ethanol to Washing 1 and Washing 2 Solution before use.
2. Check Lysis, Binding and Washing 1 Solution for any precipitation, and any precipitant can be dissolved by warming at 50℃.

1. Transfer 100 mg~500 mg of soil to a 1.5 ml tube (not provided).

2. Add 200 µl of Lysozyme Solution and 20 µl of Lysozyme (50 mg/ml) and resuspend the soil mixture by vortexing for 10 sec.

3. Incubate it into 37℃ water bath for 30 minutes.
Mix well occasionally during incubation to disperse the sample

4. Centrifuge at 13,000 rpm for 1 ~ 3 minutes and discard the supernatant.

5. Add 500 µl of Lysis Solution and 20 µl Proteinase K solution (20 mg/ml) and resuspend the soil mixture by vortexing for 10 sec.

6. Incubate it into 56℃ water bath for 10 minutes. Vortex occasionally during incubation for disperse the sample.
Optional RNase A treatment: If RNA-free genomic DNA is required, add the 20 µl of RNase A Solution (10 mg/ml, Not provided).

7. Add 200 µl of Precipitation Solution to the sample tube, mix well by inverting and incubate for 1~5 minutes at 4℃ or chilled water.

8. Centrifuge at 13,000 rpm for 3~5 minutes.

9. Transfer 500 µl of the clear lysate (supernatant) to a new 1.5 ml micro-centrifuge tube (not provided).

10. Add 300 µl of Binding Solution and 200 µl of absolute ethanol to the sample tube including the clear lysate (supernatant), and mix well by pulse-vortexing for 10 sec.
After this step, briefly spin down to get the drops clinging under the lid.

11. Carefully transfer 500 µl of the lysate mixture into the upper reservoir of the spin column with 2.0ml collection tube without wetting the rim and centrifuge at 13,000 rpm for 30 sec.

12. Pour off the flow-through and assemble the spin column with the 2.0 ml collection tube.

13. Repeat step 11 and 12, until all of the sample has been processed.

14. Add 500 µl of Washing 1 Solution to the spin column with collection tube and centrifuge at 13,000 rpm for 1 minute: Pour off the flow-through and assemble the spin column with the 2.0 ml collection tube.

15. Add 500 µl of Washing 2 Solution to the spin column with collection tube and centrifuge at 13,000 rpm for 1 minute: Pour off the flow-through and assemble the spin column with the 2.0 ml collection tube.

16. Dry the spin column by additional centrifugation at 13,000 rpm for 1 min to remove the residual ethanol in spin column.

17. Transfer the spin column to the new 1.5 ml micro-centrifuge tube (Not provided).

18. Add 50~100 µl of Elution Solution to the center of spin column with micro-centrifuge tube, and let stand for at least 1 minute.

19. Elute the genomic DNA by centrifugation at 13,000 rpm for 1 min.