



SuSpin Bacterial Fecal/Soil DNA Isolation Kit

Catalog No

- NA01B100
- NA01B101

Size

- 50 preps
- 100 preps

Description: The SuSpin Bacterial Fecal/Soil DNA Isolation Kit is designed for the simple, rapid isolation of inhibitor-free, PCR-quality and sequencing DNA from a variety of environmental samples (fecal, soil, root, leaf, water, etc). The kit can be used to successfully isolate DNA from tough-to-lyse Gram-positive and Gram-negative bacteria, fungi, algae, protozoa, etc. that inhabit environmental samples. The procedure is easy and can be completed in as little as 25 minutes: environmental samples (≤ 200 mg each) are added directly to a Beading Tubes and rapidly and efficiently lysed by bead beating without the use of organic denaturants or proteinases. The SuSpin Bacterial Fecal/Soil DNA Isolation Kit is then used to isolate the DNA, which is subsequently filtered to remove humic acids/polyphenols that inhibit PCR. The DNA is ideal for downstream molecular-based applications including PCR, NGS, arrays, genotyping, etc.

Kit Components:

Component	Amount	Storage
Bead Tube	50-100 pcs	RT
Beading Buffer	25-50 ml	RT
Lysis Buffer	25-50 ml	RT
Wash Buffer	25-50 ml	RT
Elution Buffer	5-10 ml	RT
Spin Column	50-100 pcs	RT
Collection Tubes	50-100 pcs	RT
Instruction Manual	1 pc	RT

Storage Conditions:

Store all contents at room temperature.

Kit Protocol:

- 1) Add ≤ 200 mg of environmental sample (soil, root, leaf, etc) to a Bead Tubes. Add 500 μ l Beading Buffer to the tube.
For environmental water samples:
Centrifuge the 15 ml-50 ml environmental water sample (4,000 x g for 10 minute). Discard the supernatant. Add 200 μ l of PBS to the pellet and vortex to resuspend. Transfer all resuspended water sample (200 μ l) to Bead Tubes. Add 500 μ l Beading Buffer to the tube.
- 2) Vortex the Bead Tubes for 15 minutes.
- 3) Centrifuge the Bead Tubes in a microcentrifuge at $\geq 10,000$ x g for 1 minute.
- 4) After centrifugation, 400-500 μ l of supernatant was taken into a clean tube and 500 μ l of "Lysis Buffer" was added and incubated for 10 minutes at room temperature.
- 5) After incubation, the mixture was transferred to a Spin column and centrifuged at 10000xg for 1 minute.
- 6) After the liquid passing through the column was discarded, 500 μ l of "Wash Buffer" was added to the silica column and centrifuged at 10000xg for 1 minute.
- 7) Repeat the Step 6.
- 8) After the liquid passing through the column was discarded, the Spin column was centrifuged empty at 15000xg for 1 minute.
- 9) After centrifugation, after the silica column was transferred to a clean 1.5 ml microcentrifuge tube, 50 μ l of DNA Elution Buffer was added to the column matrix and centrifuged at 15000xg for 1 minute.

The obtained DNA is now suitable for PCR, NGS, arrays, genotyping, etc. applications.

