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Protocol for DNA purification from soil samples

This protocol is for use of a QuickPick™ kit together with a QuicPick™ magnetic tool.

1. Dehydrate soil samples with ethanol
    a. 250 µl of sample mixed with 1 ml of 100 % ethanol in tube
    b. Vortex, then sediment
    c. Extract the supernatant
    d. Repeat once

2. Dry the sample at 55°C in a heating block

3. Transfer 100 µg into a new tube and add 400 µl of TE Buffer, 40 µl of PK, and 400 µl of Lysis Buffer. Mix well by inverting and pulse-vortexing the tube for 15 s. Incubate at 65°C for 3 hours
    a. Vortex at the 30 min, 1hr, 2hr, and 3hr

4. Spin down and transfer the supernatant into a new tube and discard the pellet.

5. Proceed with standard protocol
    a. Add 1.2 volumes of Binding Buffer and 20 µl of Magnetic Particles.
    b. Incubate 5 – 10 minutes keeping the particles in suspension.
    c. Wash 3 times; twice with 750 µl of Wash Buffer 1 and once with 750 µl of Wash Buffer 2
    d. Elute in 20 - 200 µl of Elution Buffer

Table 1. Reagent volumes for genomic DNA purification from soil

Reagent	**Reagent volume per preparation**
Sample amount	**250 µl**
100 % Ethanol	2 x 1 ml
TE buffer	400 µl
Lysis Buffer	400 µl
Proteinase K	40 µl
Binding Buffer	1.2 volumes
Magnetic Particles	20 µl
Wash Buffer 1	2 x 750 µl
Wash Buffer 2	750 µl
Elution Buffer	20 - 200 µl