Quick-Start Protocol January 2017

MagAttract® PowerSoil® DNA EP Kit (384)

RNase A Solution should be stored at 2–8°C. All other reagents and kit components of the MagAttract PowerSoil DNA EP Kit (384) can be stored at room temperature (15–30°C).

Further information

- Safety Data Sheets: **www.qiagen.com/safety**
- Technical Assistance: **support.qiagen.com**

Notes before starting

- Add 4 µl RNase A Solution to each 750 µl of PowerBead Solution. Each 96 well plate will require exactly 72 ml of this mixture. To allow for pipetting variations and overage for the reagent reservoir, we suggest adding 400 µl of the RNase A Solution to 75 ml of the PowerMag® Bead Solution for every 96 well plate you plan to process.
- If Solution SL has precipitated, heat at 60°C until the precipitate has dissolved. Mix gently. Solution SL can be used while it is still warm.

1. Carefully peel off the Square Well Mat that covers the PowerBead DNA Plate and set aside. Add 0.25 g of soil sample to each well of the PowerBead DNA Plate.
   Note: This is an appropriate stopping point. You can store the PowerBead DNA Plate at 2–8°C covered with the Square Well Mat.
2. Add 750 µl of PowerBead/RNase A Solution to each well of the PowerBead DNA Plate.
3. Add 60 µl of Solution SL to each well. Secure the Square Well Mat (from Step 1) tightly to the PowerBead DNA Plate.
   Note: A proper seal of the mat is critical to prevent loss of sample and leakage.
4. Place each PowerBead Plate between 2 Adapter Plates (cat. no.11990) and place on a 96 Well Plate Shaker (cat. no. 11996). Reference the protocol provided with the Adapter Plates for proper placement. Shake at speed 20 for 10 min.
5. After the first 10 min cycle, remove the block and rotate it so that the side closest to the machine body is now furthest from the machine. Shake again at speed 20 for 10 min.
6. Centrifuge the PowerBead DNA Plate at 4500 x *g* for 6 min at room temperature.
7. Carefully and without splashing, remove and discard the Square Well Mat and transfer the supernatant to a clean 1 ml Collection Plate (provided).

8. Add 450 µl of Solution IR to each well and apply Sealing Tape to the 1 ml Collection Plate. Vortex horizontally for 5 s and incubate at 2–8°C for 10 min. Centrifuge the plate at 4500 x *g* for 6 min at room temperature. Remove and discard Sealing Tape.
9. Avoiding the pellet, transfer the entire volume of supernatant to a new 1 ml Collection Plate (provided). Apply Sealing Tape and centrifuge at 4500 x *g* for 6 min. Remove and discard Sealing Tape.
10. Avoiding any residual pellet, transfer no more than 850 µl of supernatant to a 2 ml Collection Plate (provided).
    Note: You may place the supernatant in the 2 ml Collection Plate at 2–8°C for several hours if you need to stop or if you can only process one 96 well plate at a time.
11. Place the 2 ml Collection Plate containing the supernatant on the ep*Motion*® robotic deck as indicated in the ep*Motion* program worktable.
12. For each 96 well plate to be processed, add 174 ml of ClearMag® Wash Solution into an Eppendorf 400 ml reservoir placed at the appropriate location on the deck as indicated in the ep*Motion* program worktable.
13. For each 96 well plate to be processed, add 11 ml of Solution EB into an Eppendorf 30 ml reservoir placed in an Eppendorf tub holder at the appropriate location on the deck as indicated in the ep*Motion* program worktable.
14. Vortex the bottle containing ClearMag Beads (Zorb Reagent) until beads are resuspended. For each 96 well plate to be processed, add 2 ml ClearMag Beads to 85 ml of ClearMag Binding Solution in a mixing vessel (user provided). Vortex well to mix.
15. Transfer the entire volume of ClearMag Binding Solution/ClearMag Beads into an Eppendorf 100 ml reservoir placed in an Eppendorf tub holder located at the appropriate location on the deck as indicated on the ep*Motion* program worktable.
16. Initiate the protocol.
    Note: Start the protocol immediately to avoid settling of the beads. If there is a delay of more than 3 min, re-agitate the beads.
17. Upon completion, cover the wells of the 96 Well Plate with an Elution Sealing Mat (provided). The DNA is now ready for downstream applications.