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Protocol status: Working
We use this protocol and it's working

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Qiagen DNA PowerWater DNeasy Extraction

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DISCLAIMER

This protocol is mostly taken from the Qiagen power water kit manufacturer details

ABSTRACT

These are instructions for using the Qiagen Power Water Kit for doing Extraction from drinking water samples

BEFORE START INSTRUCTIONS

Solution PW1 must be warmed at 55°C for 5–10 minutes to dissolve precipitates.
If Solution PW3 has precipitated, heat at 55°C for 5–10 minutes to dissolve precipitate.
Shake to mix Solution PW4 before use.

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1 Insert the filter into a 5 ml PowerWater DNA Bead Tube.

2 Add 1 ml of Solution PW1 to the PowerWater DNA Bead

3 Secure the tube horizontally to a Vortex and tape it extensively

4 Vortex at maximum speed for 5 min. Centrifuge the tubes ≤4000 x g for 1 min at room temperature

5 Transfer the supernatant to a clean 2 ml Collection Tube Draw up the supernatant using a 1 ml pipette tip by placing it down into the beads.

6 Centrifuge at 13,000 x g for 1 min at room temperature.

7 Avoiding the pellet, transfer the supernatant to a clean 2 ml Collection Tube (provided).

8 Add 200 µl of Solution IRS and vortex briefly to mix. Incubate at 2–8°C for 5 min.

9 Centrifuge the tubes at 13,000 x g for 1 min.

10 Avoiding the pellet, transfer the supernatant to a clean 2 ml Collection Tube (provided).

11 Add 650 µl of Solution PW3 and vortex briefly to mix.

12 Load 650 µl of supernatant onto an MB Spin Column. Centrifuge at 13,000 x g for 1 min. Discard the flow-through. Repeat until all the supernatant has been processed.

13 Place the MB Spin Column Filter into a clean 2 ml Collection Tube.

14 Add 650 µl of Solution PW4 (shake before use). Centrifuge at 13,000 x g for 1 min.

15 Discard the flow-through and add 650 µl of ethanol and centrifuge at 13,000 x g for 1 min.

16 Discard the flow-through and centrifuge again at 13,000 x g for 2 min.

17 Place the MB Spin Column into a clean 2 ml Collection Tube

18 Add 100 µl of Solution EB to the center of the white filter membrane.

19 Centrifuge at 13,000 x g for 1 min. 23. Discard the MB Spin Column. The DNA is now ready for downstream applications.