Quick-Start Protocol January 2017

DNeasy® PowerFood® Microbial Kit

All components and reagents of the DNeasy PowerFood Microbial Kit should 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

- Solution MBL must be warmed at 55°C for 5–10 min to dissolve precipitates prior to use. Solution MBL should be used while still warm.
- If Solution MR precipitates, warm at 55°C for 5–10 min. Solution MR can be used while still warm.
- Shake to mix Solution PW before use.

1. Homogenize the food sample using a lab blender, such as a BagMixer® 400 VW, and incubate homogenates according to FDA guidelines (Bacteriological Analytical Manual, Edition 8, Revision A /1998).
2. Add 1.8 ml of microbial food culture to a 2 ml collection tube (provided) and centrifuge at 13,000 x *g* for 1 min at room temperature. Decant the supernatant and spin the tubes at 13,000 x *g* for 1 min. Remove the remaining supernatant completely with a pipet tip.
3. Resuspend the cell pellet in 450 µl of Solution MBL.
4. Transfer the resuspended cells to a PowerBead Tube
   Note: To increase yields or for difficult cells, please refer to the Alternative Lysis Methods section in the Troubleshooting Guide.
5. Secure the PowerBead Tube horizontally to a Vortex Adapter (cat. no. 13000-V1-24).
6. Vortex at maximum speed for 10 min.
   Note: To reduce DNA shearing, please refer to the Alternative Lysis Methods section in the Troubleshooting Guide.

7. Centrifuge the tubes at a **maximum** of 13,000 x *g* for 1 min at room temperature.
8. Transfer the supernatant to a clean 2 ml collection tube (provided).
   Note: Expect approximately 400 µl of supernatant.
9. Add 100 µl of Solution IRS and vortex briefly to mix. Incubate at 2–8°C for 5 min.
10. Centrifuge the tubes at 13,000 x *g* for 1 min at room temperature.
11. Avoiding the pellet, transfer the entire volume of supernatant to a clean 2 ml collection tube (provided).
    Note: Expect approximately 450 µl of supernatant.
12. Add 900 µl of Solution MR and vortex to mix.
13. Load 650 µl of supernatant onto an MB Spin Column and centrifuge at 13,000 x *g* for 1 min. Discard the flow through and repeat until all the supernatant has been loaded onto the MB Spin Column.
    Note: A total of two loads are required for each sample processed.
14. Place the MB Spin Column into a clean 2 ml collection tube (provided).
15. Add 650 µl of Solution PW. Centrifuge at 13,000 x *g* for 1 min at room temperature.
16. Discard the flow through and add 650 µl of ethanol (provided) and centrifuge at 13,000 x *g* for 1 min at room temperature.
17. Discard the flow through and centrifuge at 13,000 x *g* for 2 min.
18. Place the MB Spin Column into a clean 2 ml collection tube (provided).
19. Add 100 µl of Solution EB to the center of the white filter membrane and centrifuge at 13,000 x *g* for 1 min.
20. Discard the MB Spin Column. The DNA is now ready for any downstream application.
    Note: We recommend storing DNA frozen (–20° to –80°C) as Solution EB does not contain EDTA.