August 2026

Quick-Start Protocol

# QIAmini PowerFecal® Pro DNA/RNA Kit

For use with the QIAmini instrument

The QIAmini PowerFecal Pro DNA/RNA Kit (48) (cat. no. 591205) is shipped at room temperature (15–25°C). Upon receipt, Solution CD2 should be stored at 2–8°C. All other reagents and kit components should be stored at room temperature.

## Further information

- *QIAmini PowerFecal Pro DNA/RNA Kit Handbook*: **www.qiagen.com/HB-3811**
- *QIAmini User Manual*: **www.qiagen.com/HB-3799**
- *TissueLyser III User Manual*: **www.qiagen.com/HB-3241**
- Safety Data Sheets: **www.qiagen.com/safety**
- Technical assistance: **support.qiagen.com**

## Equipment and reagents to be supplied by the user

- **RNA-only protocol**:
  - RNase-free DNase Set (50) (cat. no. 79254), not provided
  - Isopropanol
- **DNA-only protocol**: RNase A (17,500 U) (cat. no. 19101), not provided
- Phenol–chloroform–isoamyl alcohol (25:24:1) pH 6.5–8, not provided
- Microcentrifuge (with rotor for 2 mL tubes)
- 1.5 mL tubes
- Equipment for sample disruption and homogenization, one of the following:
  - Vortex-Genie® 2 and Vortex Adapter for 24 (1.5–2 mL) tubes (cat. no. 13000-V1-24)
  - TissueLyser III (cat. no. 9003240) with adapter sets for use with the PowerBead ProTubes (TissueLyser Adapter Set 2 × 4 (cat. no. 69982)).

## Notes before starting

- **RNA-only protocol**: Dissolve lyophilized DNase I (1500 units) in 550 µL of RNase-free water. Mix gently by inverting. Do not vortex. For long-term storage, store single-use aliquots at –15°C to –25°C. Thawed aliquots can be stored at 2–8°C for 6 weeks.
- Perform all steps at room temperature.
- Up to eight cartridges can be processed in one run.
- Download the appropriate protocol file from **www.qiagen.com/QIAmini** or from QIAmini Suite (**www.qiagen.com/QIAminiSuite**).

## Procedure

1. Spin the PowerBead Pro Tube briefly to ensure that the beads have settled at the bottom.
2. Add up to 100 mg of stool, 450 µL of Solution CD1, 150 µL Solution CD2, and 150 µL phenol–chloroform–isoamyl alcohol (25:24:1, pH 6.5–8.0) to the PowerBead Pro Tube (in that order), and vortex briefly to mix.

   **Note**: Recommended amount of starting material is 50 mg. For **RNA-only protocol**, 50 mg of stool is also the maximum amount of starting material that should be processed.
3. Mechanically disrupt the samples using one of the following methods:

   3a. Secure the PowerBead Pro Tube horizontally on a Vortex Adapter for 24 (1.5–2 mL) tubes (cat. no. 13000-V1-24). Orient the tube caps to point toward the center of the vortex adapter. Vortex at maximum speed for 10 min.

   3b. Use a TissueLyser III. Place the PowerBead Pro Tube into the TissueLyser Adapter Set 2 × 24 (cat. no. 69982). Fasten the adapter into the instrument and shake for 5 min at 25 Hz speed. Re-orient the adapter so that the side that was closest to the machine body is now furthest from it. Shake again for 5 min at 25 Hz speed.
4. Centrifuge the PowerBead Pro Tube at 15,000 × *g* for 5 min.
5. The sample supernatant can be used for DNA-only, total NA, or RNA-only extraction.
6. For **DNA-only protocol**: Transfer 420 µL sample supernatant into a new 1.5 mL tube. Add 4 µL RNase A, mix by vortexing, and incubate for 2 min at room temperature.

## Cartridge preparation

7. Invert pre-filled cartridge(s) to resuspend magnetic beads. Flick down to remove reagents and bead suspension from under the foil.
8. Place cartridge(s) into the Cartridge Frame. Make sure to keep the pull tab accessible. Ensure cartridge(s) are fully inserted into the Cartridge Frame.
9. **Important**: Carefully remove the sealing foil. Avoid splashing of reagents.
10. For **RNA-only protocol**: Pipet 75 µL Buffer RDD, 150 µL isopropanol, and 10 µL resuspended DNase I to the bead suspension in well 6 of the cartridge.
11. Transfer 420 µL sample supernatant (DNA-only: 420 µL sample supernatant mixed with 4 µL RNase A from step 6) into well 1 of the cartridge.

## Procedure on the QIAmini instrument

12. Turn on the QIAmini instrument.
13. Select the desired protocol.

    **Note**: Find a list of all imported protocols in the list view of the run menu.

    **Note**: For details on the protocol selection, refer to the *QIAmini PowerFecal Pro DNA/RNA Kit Handbook* (**www.qiagen.com/HB-3811**).
14. Open the instrument door. Load the Cartridge Frame holding the cartridge(s) into the instrument.

    **Note**: Ensure that the Cartridge Frame is placed in the correct orientation. Press the cartridges down to fully engage with the heater block.
15. Slide the Rod Cover(s) into the rod cover holder of the instrument.

    **Note**: Press the clip down to allow full insertion of the rod cover holder.
16. Close the instrument door, press  , and confirm that consumables have been installed correctly to initiate the protocol run.
17. The display shows “End of run” when the run is completed. Select **Confirm** and press  . Open the instrument door. Remove and discard the Rod Cover(s). Then remove the Cartridge Frame holding the cartridge(s) and transfer the purified nucleic acids from well 5 of each cartridge into a new 1.5 mL tube. Discard the cartridge(s).

    **Recommended**: Clean the instrument and perform a UV decontamination of the instrument chamber.

# Document Revision History

| Date | Changes |
|---|---|
| 08/2026 | Initial release |

Scan QR code for handbook.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual.