

OMNIGENE[®]•GUT Dx collection device - bacterial DNA purification protocol using QIAGEN[®] QIAamp[®] PowerFecal[®] Pro DNA Kit

This laboratory protocol is for the extraction of microbial DNA from a fecal sample collected and stabilized in the OMNIGENE[®]•GUT Dx device using the QIAamp PowerFecal Pro DNA kit.

Required reagents

- QIAGEN QIAamp PowerFecal Pro DNA Kit (Cat No./ID 51804)
- OMNIGENE Liquefaction Reagent (OM-LQR-400/OM-LQR-1600)

Required equipment

- Pipettors and wide-bore 1000 µL pipette tips (e.g., Axygen™ TF-1005-WB-R-S)
- Equipment listed as referenced in the QIAamp PowerFecal Pro DNA Kit Handbook (HB-2560-003)

Procedure

Purification steps
1. Prior to purification, shake or vortex the samples vigorously for 10 seconds.
2. Centrifuge the sample at 400 x <i>g</i> for 15 seconds; this will collect the material at the bottom of the tube.
3. With the purple cap still screwed on, unscrew the yellow tube top and set aside on a clean surface.
4. Add 500 µL of OMNIGENE Liquefaction Reagent (OM-LQR) to the sample. Screw yellow tube top with the purple cap back onto the tube.
5. Vortex the sample for 60 seconds. Sample will become visibly homogenous and liquid once the reagent is fully mixed in. IMPORTANT: If you are not proceeding immediately to extraction, repeating step 5 before proceeding to step 6 is required to guarantee a homogenous sample.
6. Briefly centrifuge the PowerBead [®] Pro tube to ensure that the beads have settled at the bottom.

Purification steps

7. With the purple cap still screwed on, unscrew the yellow tube top and set aside on a clean surface. Using a wide-bore 1000 μ L pipette tip, slowly pipette 250 μ L of the sample from the OMNIgene•GUT Dx collection tube to the PowerBead Pro tube.

IMPORTANT: Slow aspiration is critical.

8. Add 800 μ L of Solution CD1 to the PowerBead Pro tube. Gently vortex to mix.

9. Continue with the QIAamp PowerFecal Pro DNA Kit, starting at step 2 (bead vortexing).

IMPORTANT: This protocol has been validated and optimized for use with a bead vortexer. The TissueLyser II (QIAGEN) and other bead beating instruments have not been tested. Bead beater settings may require optimization. For questions or assistance, contact DNA Genotek technical support (see below).

Technical support is available Monday to Friday (9h00 to 17h00 ET):

Toll-free (North America): 1.866.813.6354, option 6

All other countries: +1.613.723.5757, option 6

Email: support@dnagenotek.com

OMNIgene-GUT Dx (OMD-200) is for in vitro diagnostic use

Some DNA Genotek products may not be available in all geographic regions.

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All DNA Genotek protocols, white papers and application notes are available in the support section of our website at www.dnagenotek.com.