GALENVS

magnetiQ

Wastewater DNA/RNA Extraction Kit

Quick Start Guide

Optional

To avoid taking pelleted or floating material:
For processing 10ml, 15ml should be spun down to collect clear supernatants, leaving behind 5ml in the tube.

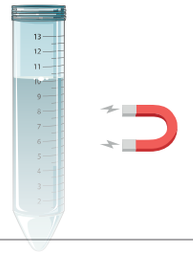
For higher biomass samples, or to obtain a full biomass profile with wastewater samples, a bead beating step is required during the lysis step. Add 1 ml of activated sludge in bead beating tube, then proceed directly to step 3.

1. Add 100µl of Concentration Beads (mix well before use) to 10ml wastewater sample, then invert 5 times to mix thoroughly.

   Incubate for 10 mins. At the 5 min mark, invert 3 times to mix the beads.

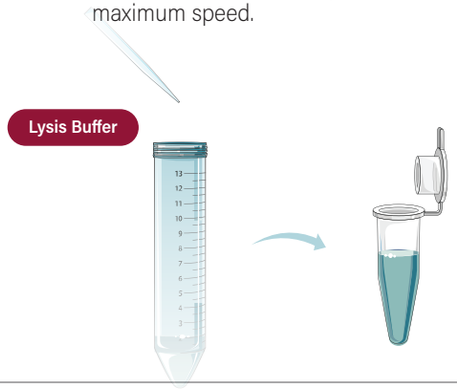
   Note: Store the beads at 4°C.

2. Place sample on 15ml magnetic rack to capture beads, then discard supernatant.



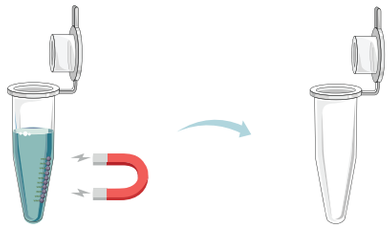
3. Add 400µl of Lysis Buffer. Resuspend the beads by pipetting up-down.

   Transfer mixture to a clean 2ml centrifuge tube. Mix for 5 mins using vortexer at maximum speed.



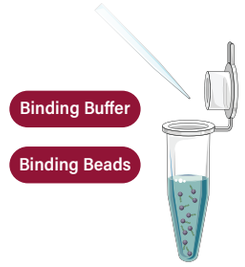
4. Use a 2ml magnetic rack to capture the beads.

   Avoiding the pellet, transfer up to 400µl of the supernatant into a clean 2ml microcentrifuge tube.

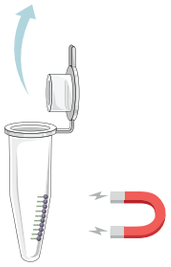


5. Add 600µl of Binding Buffer.

   Add 30µl of Binding Beads. Vortex for 10-20s, and incubate for 5 mins.

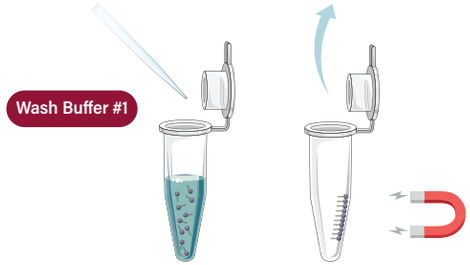


6. Place tube on magnetic rack to capture, wait 1 min then discard supernatant.



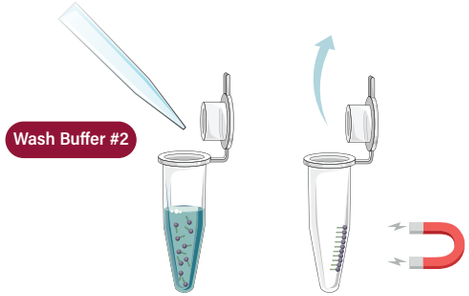
7. Add 600µl of Wash Buffer #1 to the tube and vortex for 10–20s.

   Wait 1 min then place the tube on the magnetic rack to capture. Wait 1 min then discard supernatant.



8. Add 600µl of Wash Buffer #2 to the tube and vortex for 10–20s.

   Place the tube on a magnetic rack to capture. Wait 1 min then discard supernatant.



9. Add 100µl of Elution buffer to tube and mix briefly.

   Incubate at 65°C for 10 mins.

   Place the tube on a magnetic rack to capture.

10. Wait 1 min then transfer supernatant to clean 2ml microcentrifuge tube.

Note: For increased yield perform elution twice with 50µl of buffer.