Quick-Start Protocol March 2020

MagAttract® HMW DNA Kit

The MagAttract HMW DNA Kit (cat. no. 67563) should be stored dry at room temperature (15–25°C). It is stable for up to 1 year under these conditions if not otherwise stated on the label.

Further information

- MagAttract HMW DNA Handbook: www.qiagen.com/HB-1523
- Safety Data Sheets: www.qiagen.com/safety
- Technical assistance: support.qiagen.com

Notes before starting

 This protocol is for isolating DNA from 200 µl blood using the MagAttract Magnetic Rack (cat. no. 19606) and a mixer (please see handbook for further information).

Procedure

- 1. Pipet 20 μl Proteinase K into the bottom of a 2 ml microcentrifuge tube.
- 2. Add 200 μ l of total blood to the microcentrifuge tube.
- 3. Add 4 μ l RNase A solution and 150 μ l Buffer AL to the sample. Mix carefully by pulse-vortexing. **Do not add Proteinase K directly to Buffer AL.**
- 4. Incubate at room temperature for 30 min.
- 5. Briefly centrifuge the 2 ml microcentrifuge tube to remove drops of liquid from inside the lid.
- 6. Add 15 µl MagAttract Suspension G to the sample.
- 7. Add 280 µl Buffer MB to sample. place microcentrifuge tube with sample into tube holder.
- 8. Place tube holder onto mixer. Incubate at room temperature for 3 min at 1400 rpm.
 - 8a. Place the tube holder on the magnetic base, wait until bead separation has been completed (~1 min), and remove the supernatant.



Note: The bead pellet is not easily visible. While aspirating the supernatant, avoid disturbing the magnetic bead pellet.

- 9. Add 700 μ l Buffer MW1 to the sample and place the tube holder onto the mixer. Incubate at room temperature for 1 min at 1400 rpm.
 - 9a. Place the tube holder on the magnetic base, wait until bead separation has been completed (~1 min), and remove the supernatant.
- 10. Repeat steps 9 and 9a.
- Add 700 µl Buffer PE to the sample and place the tube holder onto the mixer. Incubate at room temperature for 1 min at 1400 rpm.
 - 11a. Place the tube holder on the magnetic base, wait until bead separation has been completed (~1 min), and remove the supernatant.
- 12. Repeat steps 11 and 11a. Use a small pipette tip to remove all traces of Buffer PE.
- 13. Rinse the particles with 700 µl distilled water while the beads are fixed to the walls of the microcentrifuge tube. Incubate for 1 min and remove the supernatant.

Important: Pipet water into microcentrifuge tube against the side away from the bead pellet. All pipetting steps must be done carefully to avoid disturbing the fixed bead pellet.

- 14. Repeat step 13.
- 15. Remove the tube holder from the magnetic base and add an appropriate volume of Buffer AE (100–200 µl). Incubate at room temperature for 3 min at 1400 rpm.
- 16. Place tube holder onto magnetic base, wait until bead separation is completed (~1 min), and transfer supernatant with high-molecular-weight DNA to a new microcentrifuge tube.

Document Revision History

Date	Changes
03/2020	Reworded wash steps for clarity. Removed "Mini" from kit name in title and intro. Modified wording but not the meaning of storage conditions, for consistency with handbook. Omitted QR code for HB shortlink, as well as some notes, due to space limitations; the notes are available in the handbook.

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

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