MagBeads FastDNA® Kit for Blood

Cat. No.: 116574096 (96 PREPS)



Quick-Start Manual

Revision 1.0 Dec 2023

Notes before starting:

Add 2.5 mL Protease Dissolve Buffer into the Proteinase K, and store at -20 – 8°C after it dissolves.

Manual Extraction

Using a microcentrifuge tube

- 1. Pipette 20 μL Proteinase K and 30 μL Magbeads Particles into the bottom of a 1.5 mL microcentrifuge tube.
- Add 200 μL sample to the microcentrifuge tube. Use up to 200 μL whole blood, plasma, serum, buffy coat, or body fluids, or up to 5 x 10⁶ lymphocytes or culture cells in 200 μL PBS.
- 3. Add 500 µL Buffer MLA to the sample. Mix by pulse-vortexing for 15 s. Incubate at room temperature for 10 mins with occasional mixing. Vortex occasionally during incubation to disperse the sample, or place it on a shaker.
- 4. Place the tube on a magnetic stand and allow the beads to aggregate for 1 min. With the tube on the magnetic stand, perform the aspiration, and discard the supernatant from the tube.
- 5. Add 500 µL Buffer DW1 and resuspend the beads by vortexing for 15 s.
- 6. Place the tube on a magnetic stand and allow the beads to aggregate for 1 min. With the tube on the magnetic stand, perform the aspiration, and discard the supernatant from the tube.
- 7. Repeat step 5-6 once more.
- 8. Add 500 µL Buffer CW and resuspend the beads by vortexing for 20 s.
- 9. Place the tube on a magnetic stand and allow the beads to aggregate for 1 min. With the tube on the magnetic stand, perform the aspiration, and discard the supernatant from the tube.
- Leave the tube on the magnetic stand. Slowly add 500 µL Buffer BW3 and leave it for 20-30 s, then aspirate.
- 11. Add 100 μL Elution Buffer to the sample and shake at maximum speed for 10 mins to elute the DNA. If constant vortexing for 5 mins is not possible, vortex for 20 seconds every 1-2 mins for 10 mins.
- 12. Place the tube on a magnetic stand and allow the beads to aggregate.
- Transfer the clear supernatant containing purified DNA into a microcentrifuge tube. Store the DNA at -20°C.

MagBeads FastDNA® Kit for Blood

Cat. No.: 116574096 (96 PREPS)



Quick-Start Manual

Revision 1.0 Dec 2023

Using a deep-well plate

- 1. Pipette 20 μ L Proteinase K and 30 μ L Magbeads Particles into the bottom of a 96 deep-well plate.
- 2. Add 200 μ L sample into the well. Use up to 200 μ L whole blood, plasma, serum, buffy coat, or body fluids, or up to 5 x 10⁶ lymphocytes or culture cells in 200 μ L PBS.
- 3. Add 500 μL Buffer MLA to the sample. Vortex to mix at shaker (such as IKA MS3) for 10 min at 1000~1200 rpm.
- 4. Place the plate on a magnetic strand and allow the beads to aggregate for 2 mins. With the plate on the magnetic stand, perform the aspiration, and discard the supernatant from the tube.
- 5. Add 500 µL Buffer DW1 and vortex to mix at shaker (such as IKA MS3) for 1 min at 1200 rpm.
- 6. Place the plate on a magnetic stand and allow the beads to separate for 1 min. With the plate on the magnetic stand, perform the aspiration, and discard the supernatant from the tube.
- 7. Repeat step 5-6 once.

Extraction

- 8. Add 500 μL Buffer CW and Vortex to mix at shaker (such as IKA MS3) for 1 min at 1200 rpm.
- Place the plate on a magnetic stand and allow the beads to separate for 1 min. With the plate
 on the magnetic stand, perform the aspiration, and discard the supernatant from the tube.
- 10. Leave the plate on the magnetic stand. Slowly add 500 μ L Buffer BW3 and leave it for 30 s, then aspirate.
- 11. Add 100 μL Elution Buffer to the sample and vortex to mix at shaker (such as IKA MS3) for 10 min at 1300 rpm.
- 12. Place the plate on a magnetic stand and allow the beads to aggregate. Let it sit at room temperature until the beads are completely cleared from solution.
- Transfer the clear supernatant containing the purified DNA to a 96-well microplate (not provided). Store the DNA at -20°C



MP BIOMEDICALS

APAC: +65 6775 0008 | custserv.ap@mpbio.com EUROPE: 00800 777 9999 | custserv.eur@mpbio.com AMERICAS: 800 854 0530 | custserv.na@mpbio.com Learn more at www.mpbio.com



Scan for detailed instruction manual

