

GeneCatcher™ gDNA 0.3-1 ml Blood Kit

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Follow the steps below to purify up to 100 µg of genomic DNA from 0.3–1 mL of human blood. For more detailed protocols and additional information, refer to the kit manual.

1. Before Starting

- 1. Set water bath at 65°C.
- 2. Vortex the GeneCatcher™ Magnetic Beads to resuspend.

2. Binding the DNA

- 1. Add 60 µL of GeneCatcher™ Magnetic Beads to each well of a 24-well deep-well plate.
- 2. Add 2.5 mL of Lysis Buffer (L13) to each well and agitate the plate gently to mix.
- 3. Add 0.3–1 mL of blood to each well and agitate gently to mix.
- 4. Incubate at room temperature for 5 minutes with occasional mixing.
- 5. Place the plate on the 24-well Magnetic Separator for 3 minutes.
- 6. Remove and discard the supernatant, then remove the plate from the magnet.
- 7. Add 2.5 mL of Lysis Buffer (L13) to each well, and agitate the plate for 10–20 seconds to mix.
- 8. Place the plate on the magnetic separator for 1 minute.
- 9. Remove and discard the supernatant, then remove the plate from the magnet.

3. Purifying the DNA

- 1. Add 0.5 mL of Protease Buffer and 10 µL of Protease to each well.
- 2. Gently swirl the plate until the pellets are fully dispersed.
- 3. Incubate at 65°C for 10 minutes.
- 4. Allow the plate to cool to room temperature, and agitate gently to ensure that the pellets are dispersed.
- 5. Add 0.5 mL of 100% isopropyl alcohol (IPA) to each well, and agitate until a visible aggregate has formed.
- 6. Place the plate on the magnetic separator for 30 seconds.
- 7. Remove and discard the supernatant, then remove the plate from the magnet.
- 8. Add 1 mL of 50% (v/v) aqueous IPA, and agitate the plate for 15 seconds.
- 9. Place the plate on the magnetic separator for 30 seconds, then remove the supernatant and discard.
- 10. Gently add 150 µL of Wash Buffer (W11) to the side of each plate well, and incubate for 30 seconds.
- 11. Remove and discard the supernatant, then remove the plate from the magnet. Repeat Steps 10–11.

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GeneCatcher™ gDNA 0.3-1 ml Blood Kit, continued

4. Eluting the DNA

1. Add 250 μ L of Elution Buffer (E5) to each well, and agitate the plate gently until each pellet has been dislodged from the well wall.
2. Incubate at 65°C for 30 minutes.
3. Allow the plate to cool to room temperature, and agitate gently to ensure that the pellets are fully dispersed.
4. Place the plate on the magnetic separator until the supernatant is totally clear and colorless.
5. Remove the supernatant containing the purified DNA to a clean plate.