

## Quick-Start Protocol

# AllPrep<sup>®</sup> DNA/mRNA Nano

For the simultaneous purification of genomic DNA and mRNA from low biomass samples using the AllPrep DNA/mRNA Nano Kit (cat. no. 80272). All kit components should be stored at 2–8°C.

### Further information

- *AllPrep DNA/mRNA Nano Handbook*: [www.qiagen.com/HB-2772](http://www.qiagen.com/HB-2772)
- Safety Data Sheets: [www.qiagen.com/safety](http://www.qiagen.com/safety)
- Technical assistance: [support.qiagen.com](http://support.qiagen.com)

### Procedure

#### mRNA purification

1. Equilibrate the AdnaTest Lysis/Binding Buffer and RNA Purification Buffers A and B to room temperature (15–25°C), and place the Tris-Cl Buffer on ice.
2. For each sample, wash 20 µl Oligo(dT)<sup>25</sup> Beads twice using 20 µl AdnaTest Lysis/Binding Buffer.
3. Add 20 µl washed Oligo(dT)<sup>25</sup> Beads to each lysate.

4. Incubate for 10 min at room temperature, under tilting and rotation at approximately 5 rpm.
5. Place the reaction tube in the AdnaMag-S rack, transfer the supernatant containing the DNA into a new 1.5 ml tube (provided), and store at 4°C until use.
6. Wash beads twice, using 100 µl RNA Purification Buffer A for each wash.  
**Important:** To avoid any loss of beads, rinse lid and tube wall thoroughly.
7. Resuspend beads in 100 µl RNA Purification Buffer B and transfer into a new 1.5 ml tube (provided).
8. Wash beads once, using 100 µl RNA Purification Buffer B.
9. Wash beads once, using 100 µl ice-cold Tris-Cl Buffer.
10. Add 25 µl RNase-Free Water and incubate for 2 min at 80°C. Quickly separate beads using the AdnaMag-S rack, and then transfer eluted mRNA to a new RNase-free tube for subsequent analysis, or store at -90 to -65°C.

**Note:** Please refer to the *AllPrep DNA/mRNA Nano Handbook* for alternative elution conditions to use with AdnaTest Kits.

### Genomic DNA purification

11. Add 600 µl RNase-Free Water to each tube containing cell lysate from step 5.
12. Add 40 µl Proteinase K. Pulse-vortex 3 times, and incubate for 10 min at 56°C.
13. Add 150 µl Binding Buffer APN and 30 µl Magnetic Bead Suspension APN.
14. Incubate for 10 min at room temperature, under tilting and rotation at approximately 5 rpm.

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15. Place the reaction tube into the AdnaMag-S rack and remove the supernatant.
  16. Wash beads once, using 500  $\mu$ l Wash Buffer APN 1.
  17. Wash beads twice, using 500  $\mu$ l Wash Buffer APN 2 for each wash.
  18. Remove the reaction tube and centrifuge briefly.
  19. Place the reaction tube back into the AdnaMag-S rack.
  20. After 30 s, remove residual wash buffer completely.
  21. Remove magnet slider and resuspend beads in 25  $\mu$ l Elution Buffer AVE/APN by repeated pipetting (5x).

**Note:** For each sample, mix 22.4  $\mu$ l Buffer AVE with 7.6  $\mu$ l Elution Buffer APN.

22. Incubate for 1 min at room temperature. Centrifuge briefly.
23. Place the reaction tube in the AdnaMag-S rack and transfer the eluate into a new 1.5 ml tube.
24. Place reaction tubes with the gDNA on ice for subsequent analysis, or store at  $-30$  to  $-15^{\circ}\text{C}$ .

**Note:** Please check the *AllPrep DNA/mRNA Nano Handbook* for optional incubation for 10 min at  $95^{\circ}\text{C}$ .

## Document Revision History

Date	Changes
09/2020	Initial release



Scan QR code for handbook.

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