UptiDNAPure for human blood samples

Product Description

Catalog number: UPS54601 (25 reactions), UPS54611 (50 reactions)

Name : UptiDNAPure Genomic DNA Purification kit - from a variety of biological and clinical samples. Samples which can be used with the kit include blood, faeces, etc, in volumes ranging from 100 µl to 1 ml. The amount of DNA obtained is enough for most downstream applications (Southern blot, PCR, cloning, restriction enzyme digests, etc.).

The UptiDNAPure for human blood samples silica matrix included inthe kit has been modified and purified to increase the specific binding of DNA in the presence of chaotropic salts. There are no dangerous or hazardous reagents in the kit, and the purification process takes around 1 hour and a half (of which more than 1 hour are incubation periods).

Reagents included in the kit :

1. Lysis Buffer
2. Buffer A
3. Buffer B
4. Buffer C
5. Solution I
6. BC Silica Matrix
7. Wash Solution

Technical Information

1. Add 100 µl-1 ml of sample to 1 ml of Lysis Buffer
2. Incubate 15 min at 4 ºC.
3. Centrifuge 1 min at 10,000 rpm. Discard supernatant

Steps 1 to 3 can be omitted for samples not containing blood

4. Resuspend resulting pellet (or the sample, in case it is not blood) in 200 µl Buffer A + 10 µl Buffer B
5. Incubate 30 min at 65 ºC
6. Add 30 µl Buffer C
7. Incubate on ice for 30 min
8. Centrifuge 10 min at 12,000 rpm. Transfer the supernatant to a new tube. Discard the pellet.
9. Add 400 µl Solution I + 20 µl Silica Matrix to supernatant. Mix well by gentle pipetting. DO NOT VORTEX!
10. Centrifuge 3 min at 12,000 rpm. Decant supernatant
11. Add 500 µl **cold** Wash Solution. Thoroughly mix by pipetting. DO NOT VORTEX!
12. Centrifuge 3 min at 12,000 rpm. Decant supernatant
13. Repeat washing steps 11 and 12
14. Centrifuge Silica Matrix pellet 1 min at 12,000 rpm. Carefully eliminate Wash Solution traces with a pipette.
15. Add 100 µl sterile double-distilled water or TE. Completely resuspend Silica Matrix pellet by pipetting.
16. Incubate for 10 min at 65 ºC
17. Centrifuge 3 min at 12,000 rpm, and immediately transfer DNA-containing eluate to a new, sterile eppendorf tube. **Avoid carryover of any matrix trace** .

[18. OPTIONAL STEP. Repeat steps 15 to 17 with 50 µl sterile double-distilled water or TE on the tube containing the BC Silica Matrix pellet in order to recover any DNA trace that could remain bound to the matrix particles]

19. Use 0.4-1 µl for PCR applications. For Southern blot, use 20-50 µl.
20. Store DNA samples at –20ºC. Before use, they should be completely thawed, thoroughly mixed, and centrifuged 3 min at 12,000 rpm.

Notes

- DNA recovery yields may be decreased if Wash Solution is not kept **and used** at 4ºC
- Silica Matrix must be resuspended by gentle pipetting. Vortexing and/or freezing abrogates its DNA binding capacity.