JUL 05, 2017

OPEN ACCESS

DOI:
[dx.doi.org/10.17504/protocols.io.infcdbn](https://doi.org/10.17504/protocols.io.infcdbn)

External link:
<https://doi.org/10.1093/gigascience/gix053>

Protocol Citation: Faezah Mohd Salleh, Jazmin Ramos-Madrigal, Fernando Penaloza, Shanlin Liu, Mikkol-Holger S Sinding, Riddhi P Patel, Renata Martins, Dorina Lenz, Jorns Fickel, Christian Roos, Mohd Shahir Shamsir, Mohammad Shahfiz Azman, Burton K Lim, Stephen J Rossiter, M Thomas P Gilbert 2017. Extraction method F (CR). **protocols.io**
<https://dx.doi.org/10.17504/protocols.io.infcdbn>

MANUSCRIPT CITATION: Salleh FM, Ramos-Madrigal J, Peñaloza F, Liu S, Mikkol-Holger SS, Riddhi PP, Martins R, Lenz D, Fickel J, Roos C, Shamsir MS, Azman MS, Burton KL, Stephen JR, Wilting A, Gilbert MTP, An expanded mammal mitogenome dataset from Southeast Asia. GigaScience 6(8). doi: [10.1093/gigascience/gix053](https://doi.org/10.1093/gigascience/gix053)

Extraction method F (CR)

GigaScience

In 1 collection

Jazmin Ramos-Madrigal¹, Faezah Mohd Salleh¹, Shanlin Fernando Penaloza¹, Liu¹, Mikkol-Holger S Sinding¹, Renata Jorns Riddhi P Patel¹, Martins¹, Dorina Lenz¹, Fickel¹, Mohd Shahir Christian Roos¹, Shamsir¹, Mohammad Shahfiz Burton K Azman¹, Lim¹, Stephen J Rossiter¹, M Thomas P Andreas Wilting¹, Gilbert¹

¹Natural History Museum of Denmark, Copenhagen, Denmark

GigaScience Press

Faezah Mohd Salleh

ABSTRACT

Gen-IALFirst All-tissue DNA extraction kit -This protocol provides an efficient DNA extraction and purification of historic sample (tissue material)

MATERIALS

MATERIALS

Proteinase K Contributed by users

Isopropanol Contributed by users

Ethanol Contributed by users

BEFORE START INSTRUCTIONS

Ancient DNA lab

License: This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working

Created: Jun 26, 2017

Last Modified: Nov 09, 2017

PROTOCOL integer ID:
6567

Extraction

- 1 Cut tissue (25-50 mg) into small pieces.
- 2 Add 500 μ L Lyse 1.
500 μ L Lyse 1
- 3 Add 50 μ L Lyse 2.
50 μ L Lyse 2
- 4 Add 10 μ L Proteinase K.
10 μ L Proteinase K
- 5 Incubate in a thermomixer at 65°C for 12 hours.
12:00:00 Incubation at 65°C

- 6 Centrifuge for 10 min at 13000rpm.
00:10:00 Centrifugation
- 7 Discard supernatant without disturbing the pellet.
- 8 Add 375 µl Lyse 3
375 µL Lyse 3
- 9 Vortex for 20 sec.
00:00:20 Vortex
- 10 Leave it for 5 min in the freezer (-20°C)
00:05:00 Freezer
- 11 Centrifuge 20 min at 13000rpm.
00:20:00 Centrifugation
- 12 Transfer the supernatant in a new tube.
- 13 Add 640 µl isopropanol.
640 µL Isopropanol
- 14 Mix by inversion.

15 Centrifuge for 15 min at 13000 rpm.

00:15:00 Centrifugation

16 Remove the supernatant (don't touch the pellet).

17 Add 150 µl ethanol.

150 µL Ethanol

18 Centrifuge for 5 min at 13000 rpm.

00:05:00 Centrifugation

19 Remove the ethanol with a pipette (don't touch the pellet).

20 Dry the pellet (37°C open lid max 5 min).

00:05:00 Dry

21 Re-suspend the pellet in 100 µl Buffer AE.

100 µL Buffer AE

22 Measure DNA concentration on Nanodrop (Thermo Fischer Scientific, Darmstadt, DE).