

VERSION 1

FEB 06, 2023

OPEN BACCESS

DOI:

dx.doi.org/10.17504/protocol s.io.n92ldp2m8l5b/v1

Protocol Citation: Boyang Liu, Liangyu Cui, Yue Ma, Diancheng Yang, Yanan Gong, Yanchun Xu, Shuhui Yang, Song Huang 2023. DNA extraction protocol for the Bungarus multicinctus by using AxyPrepTM Multisource Genomic DNA Miniprep Kit. protocols.io

https://dx.doi.org/10.17504/protocols.io.n92ldp2m8l5b/v1

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: Feb 01, 2023

Last Modified: Feb 06, 2023

PROTOCOL integer ID:

76183

© DNA extraction protocol for the Bungarus multicinctus by using AxyPrepTM Multisource Genomic DNA Miniprep Kit V.1

In 1 collection

Boyang Liu¹, Liangyu Cui¹, Yue Ma¹, Diancheng Yang², Yanan Gong², Yanchun Xu¹, Shuhui Yang¹, Song Huang²

¹College of Wildlife and Protected Area, Northeast Forestry University, Harbin 150040. China:

²Anhui Province Key Laboratory of the Conservation and Exploitation of Biological Resource, College of Life Sciences, Anhui Normal University, Wuhu 241000, China



Boyang Liu

ABSTRACT

Genomic DNA was extracted from the muscle of a *Bungarus multicinctus* using the AxyPrepTM Multisource Genomic DNA Miniprep Kit (Axygen, China) with modifications as outlined in this protocol.

Keywords: DNA extraction, AxyPrepTM Multisource Genomic DNA Miniprep Kit

The following protocol is a modification of the protocol by using the AxyPrepTM Multisource Genomic DNA Miniprep Kit.

Approximately 10mg tissue was minced with sterilized scissors on ice.



2 Add 350 μl Buffer PBS and 15 μl SDS Lysis Buffer and shake for 30s.



© 00:00:30

3 Add 150 μl Buffer C-L and 20 μl Proteinase K. Immediately vortex for 1 min to mix well. After brief centrifugation, incubate at 56°C for 10 min.



(:) 00:01:00



4 Add 350 μl Buffer P-D, vortex for 30s to mix well, and centrifuge at 12,000×g for 10 min.



© 00:00:30

\$5 12000 rpm, 00:10:00

Place the DNA preparation tube in a 2 ml centrifuge tube, transfer the mixture in step 4 to the preparation tube, and centrifuge at 12,000×g for 1 min.

```
5 12000 rpm, 00:01:00
```

Discard the filtrate, put the preparation tube back into the original 2 ml centrifuge tube, add 500μ l Buffer W1, and centrifuge at $12,000\times g$ for 1 min.

```
5 12000 rpm, 00:01:00
```

Discard the filtrate, put the preparation tube back into the original 2 ml centrifuge tube, add 700µl Buffer W2, centrifuge at 12,000×g for 1 min.

5 12000 rpm, 00:01:00

7.1 In the same way, cleanse again with 700µl Buffer W2.

Note

- 1. Confirm that absolute ethanol has been added to Buffer W2 concentrate according to the volume specified on the reagent bottle.
- 2. Cleansing again with Buffer W2 can ensure that the salt is completely removed and eliminates the impact on the enzyme digestion reaction.
- **8** Discard the filtrate, put the preparation tube back into the original 2ml centrifuge tube, and centrifuge at 12,000×g for 1 min.

45 12000 rpm, 00:01:00

Place the DNA preparation tube in another clean 1.5 ml centrifuge tube, add 100-200µl Eluent or deionized water to the center of the preparation tube membrane, stand at room temperature for 1 min, and centrifuge at 12,000×g for 1 min to elute DNA.

(5 12000 rpm, 00:01:00

1m