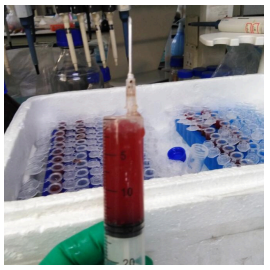
Apr 21, 2019

Extration of Scapharca broughtonii genomic DNA



GigaScience

In 1 collection

DOI
dx.doi.org/10.17504/protocols.io.zhaf32e

Chang-Ming CM Bai[1]

[1]Yellow Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences

Chang-Ming CM Bai
Yellow Sea Fisheries Research Institute, Chinese Academy of ...

DOI: https://dx.doi.org/10.17504/protocols.io.zhaf32e

External link: https://doi.org/10.1093/gigascience/giz067

Protocol Citation: Chang-Ming CM Bai 2019. Extration of Scapharca broughtonii genomic DNA. **protocols.io** **https://dx.doi.org/10.17504/protocols.io.zhaf32e**

Manuscript citation:
Chang-Ming Bai, Lu-Sheng Xin, Umberto Rosani, Biao Wu, Qing-Chen Wang, Xiao-Ke Duan, Zhi-Hong Liu, Chong-Ming Wang, Chromosomal-level assembly of the blood clam, *Scapharca* (*Anadara*) *broughtonii*, using long sequence reads and Hi-C, *GigaScience*, Volume 8, Issue 7, July 2019, giz067, https://doi.org/10.1093/gigascience/giz067

Protocol status: Working
We use this protocol and it's working

Created: March 25, 2019

Last Modified: April 21, 2019

Protocol Integer ID: 21762

Keywords: extration of scapharca broughtonii genomic dna, scapharca broughtonii genomic dna, excessive polysaccharide in scapharca broughtonii tissue, scapharca broughtonii tissue, dna extraction, scapharca, genomic dna, dna, excessive polysaccharide, broughtonii

Abstract

This protocol is used to eliminate excessive polysaccharide in *Scapharca broughtonii* tissues during DNA extraction.

Attachments

XLSX

工作簿13.xlsx

9KB

Troubleshooting

1 Collect 1 mL haemocyte into a 1.5 mL microcentrifuge tube and centrifuge at 1000 g for 10 min at 4℃, then discard the supermatant and resuspend the pellet with 200 µL PBS.

2 Add 200 µL Buffer AL* and 20µL Rnase A, mix thoroughly by vortexing and put the tube at room temperature for 3-5 min.

Note

*: these items were provided by Qiagen DNeasy® Blood & Tissue kit (Catalog no. 69504)

3 Add 20 µl proteinase K*. Mix thoroughly by vortexing, and incubate at 56 ℃ for 15 min. Then add 10% SDS (Sodium dodecyl sulfate) and continue to incubate at 56 ℃ for 15 min.

Note

*: these items were provided by Qiagen DNeasy® Blood & Tissue kit (Catalog no. 69504)

4 Add the same volume of colled Chloroform at 4℃ and mix by inverting, then put the tube at room temperature for 10 min.

5 Centrifuge at 12,000 g for 10 min at 4℃ and then transfer the supermatant aqueous phase in a new tube.

6 Add 1/3 volume of absolute ethanol, and then mix by inverting.

7 Pipet 700 µl mixture from step 6 into the DNeasy Mini spin column* placed in a 2 ml collection tube*. Centrifuge at 12,000 g for 30 sec at 4℃. Discard flow-through and collection tube.

Note

*: these items were provided by Qiagen DNeasy® Blood & Tissue kit (Catalog no. 69504)

8 Place the DNeasy Mini spin column* in a new 2 ml collection tube*, add 500 µl Buffer AW1*, and centrifuge at 12,000 g for 30 sec at 4℃. Discard flow-through and collection

tube.

Note

*: these items were provided by Qiagen DNeasy® Blood & Tissue kit (Catalog no. 69504)

9 Place the DNeasy Mini spin column* in a new 2 ml collection tube*, add 500 µl Buffer AW2*, and centrifuge at 12,000 g for 30 sec at 4℃. Discard flow-through and collection tube.

Note

*: these items were provided by Qiagen DNeasy® Blood & Tissue kit (Catalog no. 69504)

10 Repeat the step 9.

11 Place the DNeasy Mini spin column* in a new 2 ml collection tube*, centrifuge at 12,000 g for 2 min at 4℃, and then put the spin column at room tempreture for 10 min to dry the DNeasy membrane.

Note

*: these items were provided by Qiagen DNeasy® Blood & Tissue kit (Catalog no. 69504)

12 Place the DNeasy Mini spin column* in a clean 1.5 ml microcentrifuge tube and pipet 50 µl Buffer AE* directly onto the DNeasy membrane. Incubate at room temperature for 1 min, and then centrifuge for 1 min at 12,000 g to elute.

Note

*: these items were provided by Qiagen DNeasy® Blood & Tissue kit (Catalog no. 69504)