Feb 13, 2025 Version 1

DNeasy Blood & Tissue Kit for eDNA analysis of stomach contents of shrimps V.1

DOI
https://dx.doi.org/10.17504/protocols.io.5qpvo9d2zv4o/v1

Celine Richard[1]

[1]The Arctic University of Norway

Celine Richard
The Arctic University of Norway

DOI: https://dx.doi.org/10.17504/protocols.io.5qpvo9d2zv4o/v1

Protocol Citation: Celine Richard 2025. DNeasy Blood & Tissue Kit for eDNA analysis of stomach contents of shrimps. **protocols.io** https://dx.doi.org/10.17504/protocols.io.5qpvo9d2zv4o/v1

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

Created: February 13, 2025

Last Modified: February 13, 2025

Protocol Integer ID: 120164

Keywords: stomach contents of shrimps dna extraction, shrimps dna extraction, edna analysis of stomach content, tissue kit for edna analysis, shrimp, edna analysis, stomach content, extraction, dneasy blood, dna, tissue kit, tissue

Abstract

DNA extraction for eDNA analysis of stomach contents of shrimps

Notes before starting

1 * Perform all centrifugation steps at room temperature (15-25°C)
* Redissolve any precipitates in Buffer AL and Buffer ATL
* Buffer AL should be premixed with ethanol before use (Add 90ml of EtOH to bottle containing 86ml Buffer or 260 ml EtOH into a bottle containing 247 ml Buffer and shake thoroughly. Mark bottle.
* Add ethanol to Buffer AW1 and Buffer AW2 concentrates and mark on the bottle
* Buffer ATL and Buffer AL may form precipitates upon storage. If necessary, warm up to 56°C for 5 min until the precipitates have fully dissolve
* Mix Buffer AW1 before use by inverting several times
* Equilibrate frozen tissue or cell pellets to room temperature
* Preheat an incubator to 56°C

Protocol

2 **Tissue:** For rodent tails, use 0.025 g (25 mg) of tissue.
Add 180 µl **Buffer ATL**.
Add 20 µl **proteinase K**, mix by vortexing and incubate at 56°C **overnight** (until completely lysed). Vortex/mix during incubation. Vortex 15 sec directly before proceeding to step 2.

3 Add 200 µl **Buffer AL**. Immediately mix by vortexing.
Incubate sample at 56°C for 10 min.

4 Add 200 µl **Ethanol** (100%). Mix thoroughly by vortexing.

5 Pipet the mixture into a DNeasy Mini spin column placed in a 2 ml collection tube.
Centrifuge at 20,000 x g for 1 min.
Discard the flow through and collection tube.

6 Place the spin column in a new 2 ml collection tube.
Add 500 µl **Buffer AW1**. Centrifuge for 1 min at 20,000 x g.
Discard flow-through and collection tube.

7 Place the spin column in a new 2 ml collection tube.
Add 500 µl **Buffer AW2**. Centrifuge for 3 min at 20,000 x g.
Discard flow-through and collection tube.

8 Transfer the spin column to a new 1.5 ml or 2 ml microcentrifuge tube.

9 Preheat **Buffer AE** at 56°C before adding in.

10 Elute the DNA by adding 100 µl **Buffer AE** to the center of the spin column membrane.
Incubate for 1 min at room temperature (15-25°C).
Centrifuge for 1 min at 6000 x g.

11 Optional: Repeat step 8 for increased DNA yield, collect DNA in a separate microcentrifuge tube.