

DNA Extraction Protocol

Matthew Sullivan

Abstract

Citation: Matthew Sullivan DNA Extraction Protocol. **protocols.io**

dx.doi.org/10.17504/protocols.io.c32yqd

Published: 25 Jan 2016

Guidelines

This protocol comes from a group of other protocols. This protocol is (2) of (4):

1. ['Large Volume Marine Cyanophage Phage Protocols'](#)
2. ['DNA Extraction Protocol'](#)
3. ['DNA Precipitation Protocol'](#)
4. ['Checking DNA Concentration with Agarose Gel'](#)

Needed:

- CsCl
- Proteinase K
- SDS
- Incubator
- Phenol
- Microfuge @ 6,000rpm
- Wide-bore pipette
- Tube
- Chloroform

Protocol

Step 1.

Create mixture of CsCl, Proteinase K, and SDS.

PROTOCOL

. [CsCl purified phage lysate, Proteinase K, SDS](#)

CONTACT: [VERVE Team](#)

Mixture

Step 1.1.

Mix 1 volume of dialyzed, CsCl purified phage lysate with 50 µg/ml Proteinase K

Mixture

Step 1.2.

Mix solution in 0.5% SDS.

Step 2.

Mix and incubate 1 hour at 56°C.

 DURATION

01:00:00

Step 3.

Cool to room temperature

Step 4.

Add an equal volume of phenol and invert several times.

Step 5.

Spin 3000g (6000 rpm on microfuge), 5 minutes, room temperature.

 DURATION

00:05:00

Step 6.

Carefully transfer the supernatant with a wide-bore pipette to a fresh tube.

Step 7.

Add an equal volume of phenol:chloroform (1:1), invert.

Step 8.

Spin again, 3000g (6000 rpm on microfuge), 5 minutes, room temperature.

 DURATION

00:05:00

Step 9.

Transfer the supernatant, as done before.

Step 10.

Add an equal volume of chloroform and invert.

Step 11.

Spin again, 3000g (6000 rpm on microfuge), 5 minutes, room temperature.

 DURATION

00:05:00

Step 12.

Transfer the supernatant, as done before.

 DURATION

00:05:00