Jul 03, 2022

DNA extraction (BOMB)

Forked from DNA extraction (BOMB)

DOI
dx.doi.org/10.17504/protocols.io.261gen7ryg47/v1

Tsu-Chun Hung[1], Yin-Tse Huang[1]

[1]KMU

Yin-Tse Huang
Kaohsiung Medical University

DOI: https://dx.doi.org/10.17504/protocols.io.261gen7ryg47/v1

Protocol Citation: Tsu-Chun Hung, Yin-Tse Huang 2022. DNA extraction (BOMB). **protocols.io https://dx.doi.org/10.17504/protocols.io.261gen7ryg47/v1**

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

Created: July 03, 2022

Last Modified: September 13, 2023

Protocol Integer ID: 65878

Keywords: dna extraction, bomb, dna, extraction

Abstract

DNA extraction (BOMB)

Troubleshooting

Sample Collection

3m

1 Add 200 µL of **1mm beads** to 1.5ml enppendorf tube — 30s

2 Add 200 µL of **0.5mm beads** to 1.5ml enppendorf tube — 30s

3 Add 225 µL of **TE buffer** to 2ml enppendorf tube — 30s

Note

TE buffer is in 4°C fridge

4 Add 375 µL of **lysis buffer** to 2ml enppendorf tube — 30s

Note

Lysis buffer is in 4°C fridge

5 Add 267 µL of **10M ammonium acetate** to 2ml enppendorf tube

Note

10M ammonium acetate is in 4°C fridge

6 Collect 10-20 mg of **sample** to 2ml enppendorf tube — 1m

Sample crush

4m

7 Put 2ml eppendorf tube in mixmill for sample crush, at this condition: 30 rpm/s, for 4mins — 4m

00:04:00

Centrifugation

3m

8 Put 2ml eppendorf tube in centrifuge for centrifugation, at this condition:
17.0 x g, 25°C, 00:03:00

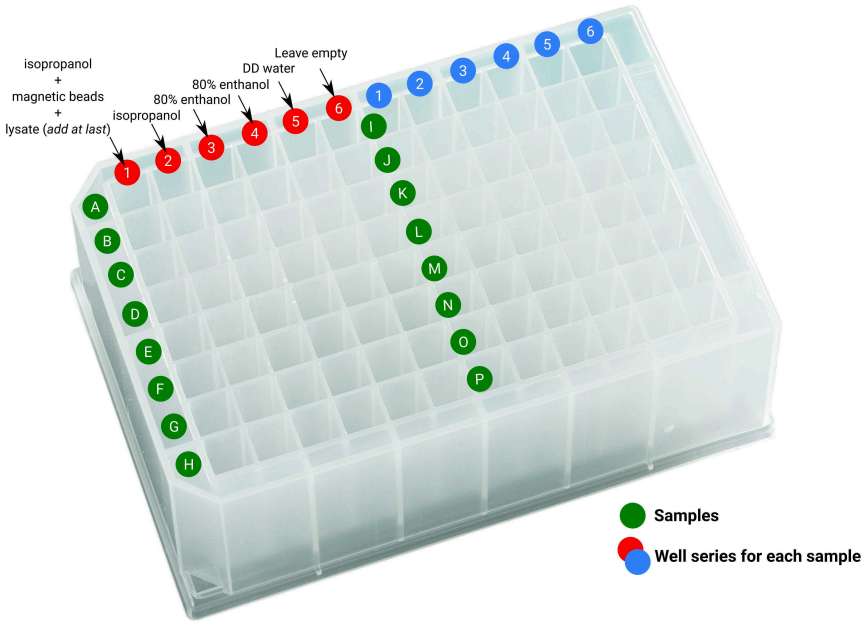
3m

DNA purification

37m 30s

9 Add 350 µL of **isopropanol** to the 1st well of 96 well plate

30s



9.1 Add 125 µL of **magnetic beads** (10 mg/ml) to the 1st well of 96 deep well plate

30s

Note

Shake the bottle and pipetting before using magnetic beads

9.2 Add 200 µL of the **sample (lysate)** from the 2ml centrifuged tube to the 1st well of 96 deep well plate 30s

Note

USUALLY ADD at LAST

10 Add 400 µL of **isopropanol** to the 2nd well of 96 deep well plate 30s

11 Add 300 µL of **80% enthanol** to the 3rd well of 96 deep well plate 30s

12 Add 300 µL of **80% enthanol** to the 4th well of 96 deep well plate 30s

13 Add 100 µL of **DD water** to the 5th well of 96 deep well plate 30s

14 Put the prepared 96 deep well plate in the automated DNA extraction machine 34m

15 After the extraction is done, collect 100 µL of the **eluted sample** as the DNA template for downstream experiments