



chemagic Food Extension Kit *for general purposes*

Kit Components

RNase A (10 mg/ml)	5 ml
Lysis Buffer 1	500 ml
Precipitation Buffer 2	200 ml

This kit is an extension of the chemagic Food Basic Kit and is intended to prepare lysates from 2 g food material. It contains enough materials for 100 preparations. The further processing of the lysates is performed by using the **chemagic Food Basic Kit** (prod.no. 01-01-161).

Required Materials

chemagic Food Basic Kit (prod.no. 01-01-161).

Purification Protocol for DNA from 2 g food

1. Place 2 g of food material in a 15 ml (50 ml) tube. Add 5 ml **Lysis Buffer 1** and 50 μ l **RNase A**, mix by vortexing and incubate for 10 minutes at 37°C.
2. Add 2 ml of **Precipitation Buffer 2** and vortex to mix.
3. Centrifuge for 5 minutes at 4000 rpm.
4. Transfer 1 ml of the supernatant to a fresh 2 ml microfuge tube and proceed with step 4 in the purification protocol for 200 mg food.



Purification Protocol for DNA from 200 mg food

1. Place 200 mg of well homogenized food material in a 2 ml microfuge tube. Add 750 μ l **Lysis Buffer 1** and 10 μ l **RNase A**, mix by vortexing and incubate for 10 minutes at 37 °C.
2. Add 300 μ l of **Precipitation Buffer 2** and vortex to mix.
3. Centrifuge for 5 minutes at high speed (14000 rpm) in a standard tabletop microcentrifuge.
4. Transfer the supernatant to a fresh 2 ml microfuge tube. Avoid pipetting floating material from the top of the liquid phase.
5. Add 30 μ l resuspended **M-PVA beads** and 0,8 volume of **Binding Buffer 3** (e.g., for 1000 μ l supernatant, add 800 μ l of **Binding Buffer 3**). Mix with 6 pipetting strokes and incubate 5 minutes at room temperature.
6. Following incubation, place the tube in a Magnetic Separator to draw the beads to the side of the tube for 2 minutes. Pipette off the supernatant and then remove the tube from the magnet.
7. Add 900 μ l **Wash Buffer 4** to the tube. Resuspend the beads in the wash buffer by pipetting the bead pellet up and down 15 times and leave 1 minutes. Separate the beads using the Magnetic Separator and discard supernatant.
8. Repeat the washing procedure using **Wash Buffer 5**.
9. Repeat the washing procedure using 70 % ethanol.
10. Separate the beads magnetically and remove the supernatant. Then, while leaving the tube in the Magnetic Separator, and the beads attracted to the side of the tube, gently add 1 ml **Wash Buffer 6**, being careful not to disrupt the pellet. Pipette off all **Wash Buffer 6** minute after addition.
11. Add 100 μ l (or another suitable volume) of **Elution Buffer 7** to the tube and resuspend the beads by pipetting.
12. Incubate the suspension for 10 minutes at 55 °C, with gentle agitation to facilitate complete DNA elution.
13. Following DNA elution place the tube in the Magnetic Separator for 1 minute to separate all the beads from solution. Remove the eluate containing the purified Nucleic Acids to a clean tube.