

DNA extraction from honey using SureFood® PREP Basic

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1 Sample preparation of pollen in honey samples

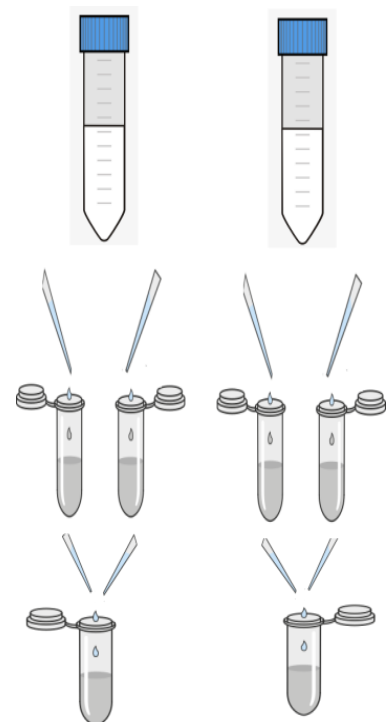
For the detection of GMOs in honey, it is necessary to prepare the pollen in the honey specially. Please prepare the samples in duplicates.

1.1 Additional required equipment and materials

- micro balance for weighing the samples
- 2.0 mL reaction tubes
- 50 mL Falcon Tubes
- (micro) centrifuges with 2.0 mL and/or 50 mL inserts
- heating block (up to 65°C)
- PCR grade water, preheated 40°C

2 Procedure

- Dose 2 x 10 g of honey sample in 50 mL Falcon Tubes
- Add 20 mL of preheated PCR grade water (40°C)
- Prepare and analyse the used PCR grade water as an additionally extraction control*
- Incubation for 10 min at 40°C under continuous shaking in a heating block – the honey must be completely dissolved
- Centrifuge the samples at 5,000 g for 10 min (Mind the orientation of tubes because of pellet formation.)
- **Attention:** do **not resuspend** the pellet in the following step! After a pellet has formed, carefully remove and discard the supernatant down to a residual volume of about 3.6 mL by pipetting
- Resuspend the pellet with the remaining liquid of 3.6 mL
- Aliquot each suspension into two 2.0 mL reaction tubes (2 x 1.8 mL + 2 x 1.8 mL)
- Centrifuge the samples at 12,000 rpm for 2 min (Mind the orientation of tubes because of pellet formation.)
- Carefully remove and discard the supernatant down to a residual volume of about 100 µL
- Resuspend the pellet in the residual liquid (100 µL) and pool both tubes to one extract
- Centrifuge samples at 12,000 rpm for 2 min
- Remove and discard supernatant down to a residual volume of about 200 µL
- Resuspend the pellet in the residual liquid (200 µL)
- Continue with step 2.3. Step 2 Lysis of the basic material of the DNA extraction with SureFood® PREP Basic (page 12)



* Description of the control

Extraction control: the extraction is performed without the sample – only used PCR grade water as an additionally extraction control and PREP reagents