

PCR protocol (DNA barcoding of isopods)

1. Turn the thermocycler on (the black one on the left)
2. Take out from the freezer: PCR PreMix, primers (working solution; 4 μ M)
3. Prepare on the bench: ddH₂O (in the right drawer), one 1.5 ml microcentrifuge tube.
4. Prepare PCR cocktail (#reactions = #samples+1; to cover pipetting error):

PCR reagent	1 reaction	5 reactions	10 reactions
PCR PreMix	10 μ l	50 μ l	100 μ l
Primer 1 (4 μ M)	2 μ l	10 μ l	20 μ l
Primer 2 (4 μ M)	2 μ l	10 μ l	20 μ l
ddH ₂ O	5.2 μ l	26 μ l	52 μ l

5. Prepare 0.2 ml PCR strip tubes (in the drawer, next to the window)
6. Take DNA samples out from the fridge.
7. Place **19.2 μ l** of PCR cocktail in each tube.
8. Add **0.8 μ l** of a DNA sample in each tube. Mixed by pipetting.
9. Place strip tubes in the thermocycler (in any block: right or left)
10. Click on “RUN” -> “PROCEED”. “Under “MAIN” find protocol ISOTEST1. Run it.

PCR settings:

- 94⁰C for 3 min
- \times 34 cycles:
 - 94⁰C for 45 sec
 - 48⁰C for 45 sec
 - 72⁰C for 1 min
- 72⁰C for 3 min
- Hold at 4⁰C for 9 hours

11. To stop the protocol, press on “CANCEL”. Turn the thermocycler off. Take the tubes out and place them in the freezer.

* After step 11 you can proceed immediately to gel electrophoresis if needed.