

NucleoSpin[®] Tissue – purification of DNA from cyanobacteria (Rev. 01)

This protocol is only a supplement to the kit's general user manual. Please refer to the kit manual for more detailed information regarding safety instructions, product-specific disclaimers, and especially preparations needed before starting the procedure. The latest version of the user manual is available at www.mn-net.com/usermanuals or can be requested from our technical service (tech-bio@mn-net.com). Material safety data sheets (MSDS) can be downloaded from www.mn-net.com/MSDS.

Additional equipment needed:

- Water bath(s) or heating block(s)
- Extra buffer containing 50 mM Tris/Cl (pH 8), 50 mM EDTA, 1 % (v/v) Triton X-100, 20 mg/mL lysozyme (or 10 mg/mL lysostaphin), 30 µL RNase (12 mg/mL)

Additional preparations before starting:

- Set incubator(s) or water bath(s) to 56 °C and 70 °C, respectively.
- Prepare extra buffer as described above.

1 Prepare sample

Centrifuge an appropriate volume of culture for **5 min at full speed** to adjust a final chlorophyll a (Chla) content of 30–40 µg. Remove supernatant carefully.

2 Pre-lyse cells

Resuspend the pellet carefully in **170 µL extra buffer** by pipetting up and down. Incubate for **30–60 min at 37 °C** and mix gently several times during incubation.

Note: The lysate becomes clear at this stage.

Add **25 µL Proteinase K** (22 mg/mL) and incubate at **56 °C for 60 min**, mix several times by inverting the tube during this incubation.

Proceed with step 3 of the standard protocol ('Lyse sample').