

Macherey Nagel NucleoSpin® Gel and PCR Clean-up

1. Preparation of the sample

a) DNA extraction from agarose gels:

- Add 200 μL Buffer NT1 for each 100 mg of agarose gel < 2%
- Incubate sample for 5-10 min at 50°C. Vortex the sample briefly every 2-3 min until the gel slice is completely dissolved.

b) PCR clean-up:

- Mix 1 volume of sample with 2 volumes of buffer NT1 (e.g., mix 100 μL PCR reaction and 200 μL Buffer NT1)

2. Bind DNA

Place a NucleoSpin® Gel and PCR Clean/up column into a collection tube (2 mL) and load up to 700 μL sample. Centrifuge for 30 s at 11,000 x g. Discard flow/through and place the column back into the collection tube.

Load remaining sample if necessary and repeat the centrifugation step.

3. Wash silica membrane

Add 700 μL Buffer NT3 to the NucleoSpin® Gel and PCR Clean/up column. Centrifuge for 30 s at 11,000 x g. Discard flow/through and place the column back into the collection tube.

Repeat this washing step to minimize chaotropic salt carryover and improve A_{260}/A_{230} values.

4. Dry silica membrane

Centrifuge for 1 min at 11,000 x g to remove Buffer NT3 completely. Make sure the spin column does not come in contact with the flow-through while removing it from the centrifuge and the collection tube.

5. Elute DNA

Place the NucleoSpin® Gel and PCR Clean/up column into a new 1.5 mL microcentrifuge tube (not provided). Add 15-30 μL Buffer NE and incubate at room temperature (18-25°C) for 1 min. Centrifuge for 1 min at 11,000 x g.