Genomic DNA

User manuals

NucleoSpin® DNA Forensic **740840 / .10 / .50 / .250**

Dear valued customer,

Thank you for choosing MACHEREY-NAGEL for your application. We have attached a short protocol for your review.

To obtain the best results we recommend to follow the detailed protocol available online, especially when you are a first time user of this kit.

All important links to the above mentioned product are listed in this leaflet.

Important information regarding product components, specifications, safety instructions, and processing protocols, can all be found on the product website and accessed easily via the QR code.

QR-Code product website

qr.mn-net.com/qr/(241)740840

Use the following QR code or the link below for direct access to the user manual.

QR-Code user manual

qr.mn-net.com/qr/(IFU)740840

It is strongly recommended to read the detailed protocol section of the user manual if using the kit for the first time. However, experienced users may refer to the protocol at a glance. The protocol at a glance is designed to be used only as a supplemental tool for quick reference while performing the purification procedure.

We are constantly improving our products and we reserve the right to make changes or additions to protocols. Please check for updated revisions for previously downloaded manuals.

This leaflet does not replace the full manual!

Protocol at a glance

Protocol for the isolation of genomic DNA from forensic samples

1 Lyse sample		Add 20 µL Liquid Proteinase K, 5 µL TCEP solution (14 mg/mL) and 450 µL Buffer FOL Mix 56 °C, 1 h
2 Adjust DNA binding conditions		Add 580 µL FOB Vortex
3 Bind DNA		Load 600 µL lysate
		1 min at 11,000 x *g*.
		Load remaining lysate 1 min at 11,000 x *g*.
4 Wash with FOW1		Add 400 µL FOW1 1 min at 11,000 x *g*.
		
5 Wash with FOW2		Add 400 µL FOW2
1st wash		1 min at 11,000 x *g*.
6 Wash with FOW2		Add 400 µL FOW2
2nd wash		1 min at 11,000 x *g*.
7 Dry silica membrane		2 min at 11,000 x *g*.
		
8 Elute DNA		Add 50 – 100 µL Buffer FOE. 1 min RT
		1 min at 11,000 x *g*.

Protocol at a glance
Protocol for the isolation of genomic DNA from bone or teeth samples

Sample preparation		Mill up to 150 mg of bone or teeth to a fine powder. Transfer up to 150 mg of bone powder into a 2 mL microcentrifuge tube.
1 Pre-lyse samples		Add 200 µL phosphate buffer (0.5 M EDTA / 0.25 M PO43-, pH 8), 700 µL Buffer T1 and 20 µL Proteinase K. Mix 56 °C shaking overnight. Afterwards 48 h at 2 – 8 °C on a shaking incubator.
2 Lyse sample		Mix, Add 800 µL Buffer B3 Mix 10 min, 70 °C Mix 10 min 5,000 x *g*. Transfer 800 µL of the supernatant to a new 2 mL microcentrifuge tube.
3 Adjust binding conditions		Add 1160 µL Binding Buffer FOB Mix
4 Bind DNA to NucleoSpin® DNA Forensic Colum		Load 600 µL lysate 1 min 11,000 x *g* Discard the flowthrough and place the column back in the Collection Tube.
5 Repeat binding step		Load 600 µL 1 min 11,000 x *g* Discard the flowthrough and place the column back in the Collection Tube.
6 Load the remaining lysate to the column		1 min at 11,000 x *g* Discard the flowthrough and place the column in a new Collection Tube (provided)
7 Wash with FOW1		Add 400 µL Buffer FOW1 to the column and centrifuge for 1 min at 11,000 x *g*. Discard the flowthrough and place the column back into the Collection Tube.
8 Wash with FOW2 (1st)		Add 400 µL Buffer FOW2 1 min 11,000 x *g*
9 Wash with FOW2 (2nd)		Add 400 µL Buffer FOW2 1 min 11,000 x *g*
10 Dry silica membrane		2 min 11,000 x *g*
11 Elute DN		Add 100 µL Buffer FOE 1 min at room temperature 1 min 11,000 x *g*

QR-Code Safety Data Sheet

Please find a digital version of the safety data sheets by following the link below:

www.mn-net.com/sds

We strongly recommend to carefully read the detailed protocol section of the product's user manual. If you have any questions about the protocol or product, please contact our Technical Support.

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