

NucleoMag[®] RNA/DNA – IsoPure[™] Mini

Protocol details

Application	Isolation of RNA and DNA from tissue and plant leaf material
Kit	NucleoMag [®] RNA/DNA Pro
REF	744370
Protocol name	NMRNADNAPro



Eight easy steps

Procedure	
1	Perform lysis according to the user manual NucleoMag [®] RNA/DNA Pro.
2	Fill the 96-well Deep-well plates 1 & 2 according to the tables for DNA and RNA sections below.
3	Load the plate on the IsoPure [™] Mini.
4	Insert tip combs on the mounting grooves.
5	Select the protocol from the instrument menu and start protocol NMRNADNAPro.
6	Remove plate 1 after the DNA extraction is finished, do not disturb or exchange the tip combs.
7	For rebinding transfer 300 µL of the rDNase reaction mixture containing the RNA from plate 1 column 6 + 12 to the second plate (column 1 + 7). Please refer to the loading table and schema Plate 2 (RNA section)
8	Place Plate 2 into the IsoPure [™] and proceed immediately with the RNA extraction.

Note: Please equip all tip combs in order to cover the magnetic rods in used and unused wells. The protocol includes a transfer and plate exchange step that requires a manual intervention (transfer rDNase reaction mix containing the RNA).

Additional consumables and instrumentation

Product	Specification	REF
IsoPure [™] Mini	Automated nucleic extraction system for MACHEREY-NAGEL's NucleoMag [®] kits enabling parallel processing of up to 16 samples	747000
Android [™] tablet	Android [™] tablet with IsoPure [™] Mini App for simple protocol design and transfer	747001
96 Deep-well plates	96 deep-well plates for IsoPure [™] Mini (25 pieces)	744955
Tip combs	8-well tip combs for IsoPure [™] Mini (50 pieces)	744960

Instant protocol transfer via QR-code

Procedure	
1	Connect the scanning device (included) to the instrument
2	Activate the instrument scanning software
3	Scan the QR-code for instant protocol transfer
4	Confirm protocol transfer on the instrument



Loading table – Plate 1 (DNA section)

Position	Reagents	Samples per plate
Column 1 + 7	Cleared Lysate (350 µL), Binding Reagent (250 µL)*, NucleoMag® B-Beads (20 µL)	Sample 1-8 Sample 9-16
Column 2 + 8	Wash Buffer MRW (900 µL)	Sample 1-8 Sample 9-16
Column 3 + 9	Wash Buffer DNA Wash (900 µL)	Sample 1-8 Sample 9-16
Column 4 + 10	Elution Buffer DNA Elute (100 µl)	Sample 1-8 Sample 9-16
Column 5 + 11	empty	Sample 1-8 Sample 9-16
Column 6 + 12	rDNase reaction mixture (300 µL)	Sample 1-8 Sample 9-16

Note: Please refer to the image below for a visual representation of the loading scheme.
 * Use binding reagent for different sample types according to the user manual NucleoMag® RNA Pro.

Loading scheme – Plate 1 (DNA section)

	1	2	3	4	5	6	7	8	9	10	11	12	
A	Binding (620 µL)	1 st Wash (900 µL)	2 nd Wash (900 µL)	DNA Elution (100 µl)		DNA digest (300 µL)	Binding (620 µL)	1 st Wash (900 µL)	2 nd Wash (900 µL)	DNA Elution (100 µl)		DNA digest (300 µL)	
B													
C													
D													
E													
F													
G													
H													

Loading table – Plate 2 (RNA section)

Position	Reagents	Samples per plate
Column 1 + 7	Rebinding Buffer MRB (350 µl) + rDNase reaction mixture containing RNA (300 µl)*	Sample 1-8 Sample 9-16
Column 2 + 8	Ethanol 70% (900 µL)	Sample 1-8 Sample 9-16
Column 3 + 9	empty	Sample 1-8 Sample 9-16
Column 4 + 10	empty	Sample 1-8 Sample 9-16
Column 5 + 11	empty	Sample 1-8 Sample 9-16
Column 6 + 12	Elution Buffer MRE (100 µL)	Sample 1-8 Sample 9-16

Note: Please refer to the image below for a visual representation of the loading scheme.

* The rDNase reaction mixture is transferred from column 6 & 12 of plate 1 after running the DNA section of the protocol. Plate 1 can be removed when the Instrument prompts to add/exchange to the RNA plate. Perform the transfer, place plate 2 into the instrument and continue the protocol.

Loading scheme – Plate 2 (RNA section)

	1	2	3	4	5	6	7	8	9	10	11	12	
A	Rebinding (350 µL + 300 µl)	3 rd Wash (900 µL)				RNA Elution (100 µL)		Rebinding (350 µL + 300 µl)	3 rd Wash (900 µL)			RNA Elution (100 µL)	
B													
C													
D													
E													
F													
G													
H													

Disclaimer

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