



High-Throughput Applications · Summary

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Medium- and High-Throughput Nucleic Acid Purification

MN offers a variety of kits for medium-throughput and high-throughput nucleic acid purification. Our solutions are based on different technologies (NucleoSpin®: silica-membrane technology, NucleoFast: ultrafiltration technology, NucleoMag: magnetic-bead technology). Kits for all applications are available for both, manual and automated use on common laboratory robotic platforms. For more information about automation process and availability of ready-to-run scripts for certain platforms please refer to www.mn-net.com/HTApplications.

Summary of applications

	manual use, centrifugation	manual use, vacuum	automated use	page
Plasmid DNA				
NucleoSpin® Multi-8 Plasmid	x ^{1,2}	x ^{1,3}		30
NucleoSpin® Multi-8 Plus Plasmid	x ^{1,2}	x ^{1,3}		30
NucleoSpin® Multi-96 Plus Plasmid	x ^{1,2}	x ³		30
NucleoSpin® Robot-8 Plasmid			x	32
NucleoSpin® 8 Plasmid Core Kit			x ¹	32
NucleoSpin® Robot-96 Plasmid			x	32
NucleoSpin® Robot-96 Plasmid Core Kit			x ¹	32
NucleoSpin® 96 Flash	x	x ³	x	34
PCR clean-up				
NucleoSpin® 8 Extract II	x ²	x	x	40
NucleoSpin® 96 Extract II	x ^{1,2}	x	x	40
NucleoFast 96 PCR	x ¹	x	x	41
NucleoMag 96 PCR			x ¹	42
Total RNA from cells and tissue				
NucleoSpin® 8 RNA	x	x ³	x	52
NucleoSpin® 96 RNA	x	x ³	x	52



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<i>Genomic DNA from blood</i>				
NucleoSpin® 8 Blood QuickPure	x			69
NucleoSpin® 96 Blood QuickPure	x			69
NucleoSpin® 8 Blood		x ¹	x	70
NucleoSpin® 96 Blood		x	x	70
NucleoSpin® 96 Blood Core Kit			x ¹	70
NucleoMag 96 Blood			x ¹	72
<i>Genomic DNA from tissue and cells</i>				
NucleoSpin® 8 Tissue	x ¹	x ^{1,3}	x	76
NucleoSpin® 96 Tissue	x	x ³	x	76
NucleoSpin® 96 Tissue Core Kit			x ¹	76
NucleoMag 96 Tissue			x ¹	78
<i>Genomic DNA from forensic samples</i>				
NucleoSpin® 8 Trace	x	x	x	80
NucleoSpin® 96 Trace	x	x	x	80
NucleoMag 96 Trace			x ¹	82
<i>Genomic DNA from plant and fungi</i>				
NucleoSpin® 8 Plant	x	x ³	x	85
NucleoSpin® 96 Plant II	x	x ³	x	85
NucleoMag 96 Plant			x ¹	87
<i>Genomic DNA from food and feed</i>				
NucleoSpin® 8 Food	x	x ³	x	89
NucleoSpin® 96 Food	x	x ³	x	89
<i>Viral RNA and DNA from serum and plasma</i>				
NucleoSpin® 8 Virus	x			95
NucleoSpin® 8 Virus Core Kit	x ¹	x ¹	x ¹	95
NucleoSpin® 96 Virus	x			95
NucleoSpin® 96 Virus Core Kit	x ¹	x ¹	x ¹	95

¹ additional material required. For details see www.mn-net.com or contact tech-bio@mn-net.com

² support protocol available at www.mn-net.com

³ suitable centrifuge for sample preparation steps required, see next page



Equipment for NucleoSpin[®], NucleoFast, and NucleoMag kits

NucleoSpin[®] kits

NucleoSpin[®] kits based on silica-membrane technology are available in flexible 8-well strip format for varying throughput and in convenient 96-well format for high-throughput nucleic acid purification.

NucleoSpin[®] 8/96 kits can be processed by centrifugation or under vacuum. The unique MN Wash Plate prevents the bottom of the NucleoSpin[®] binding strips / plate from being contaminated by ethanolic wash buffers during the washing steps, thus improving the drying of the strips / plate under vacuum and preventing ethanol contamination of the eluted DNA. The risk of cross-contamination is minimized by reduced spraying during filtration and elution steps due to optimized outlets of the NucleoSpin[®] 8-well strips and NucleoSpin[®] 96-well plates.

Required hardware

Centrifugation:

For centrifugation, a microtiterplate centrifuge* is required, which is able to accommodate NucleoSpin[®] strips / plate stacked on a Round-well Block, Square-well Block, or Rack with Tube Strips (bucket height: 85 mm) and reaches accelerations of 5 600 – 6 000 x g. For processing NucleoSpin[®] 8-well strips by centrifugation Starter Set C containing Column Holders C, MN Square-well Blocks, Rack with Tube Strips is additionally required.

Vacuum processing:

A NucleoVac 96 vacuum manifold is required for processing under vacuum (see page 120). For processing NucleoSpin[®] 8-well strips under vacuum Starter Set A containing Column Holders A and Dummy Strips is required, too.

NucleoFast kits

NucleoFast kits can be processed by centrifugation or under vacuum. For centrifugation, a microtiterplate centrifuge* is required, which is able to accommodate NucleoFast Plates stacked on a suitable waste collection plate, e.g. MN Square-well Block, and reaches accelerations of 4 500 x g. For vacuum processing the NucleoVac 96 Vacuum Manifold or other suitable vacuum manifold is required (see page 120).

NucleoMag kits

For manual processing of NucleoMag kits a suitable magnetic separator is required, e.g. NucleoMag SEP (see page 120).

*e.g. Hermle Z 513 / Z 513 K, Jouan KR4i, Heraeus Kendro Multifuge[®] 3 / 3-R, Beckman Coulter Allegra™ 25R, Hettich Rotanta 460 series, Sigma 4-15 / 4K15 / 6-15 / 6K15, Eppendorf 5804 / 5804R / 5810 / 5810R.

❗ For further information please contact our Technical Service (tech-bio@mn-net.com) or see www.mn-net.com/HTapplications