

MACHEREY-NAGEL

NucleoMag[®] DNA/RNA Water

Bioanalysis



Reliable detection of microorganisms
in water and air samples

- Fast isolation of microbial DNA and RNA from filtered samples
- Minimized downstream inhibition for reliable results
- Automation friendly

MACHEREY-NAGEL

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DNA and RNA purification from water and air

Microbial nucleic acids from water and air

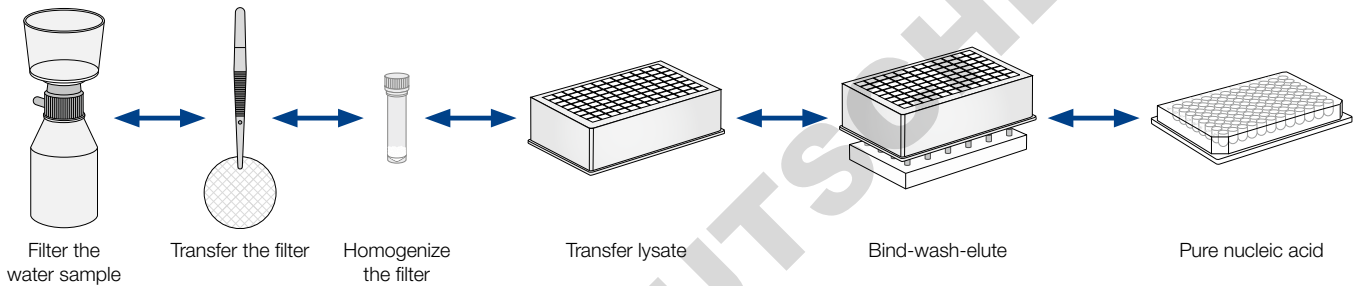
The new NucleoMag® DNA/RNA Water enables manual or automated detection of either DNA, RNA, or both molecules in parallel from a range of water samples, spanning from turbid to clear, as well as from air filters. Simultaneous detection of DNA and RNA in the same sample enables fast and accurate determination of presence of total microbes (through DNA) and living microorganisms (through RNA) in the same sample.

NucleoMag® DNA/RNA is compatible with a variety of filters and filtration systems, including conventional round filters (e.g., 25 mm to 47 mm) from various materials as well as with cartridge filters (such as Sterivex™). This makes NucleoMag® DNA/RNA Water ideal for microbial metagenomics, environmental microbiology as well as for estimation of water quality through determination of the microbial load of the sample.

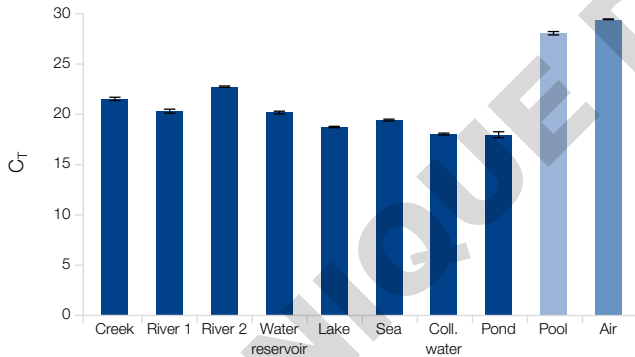
Product at a glance

	
Technology	Magnetic beads
Format	Highly reactive superparamagnetic beads
Processing	Manual or automated
Sample material	Water or air samples
Maximum amount of starting material	10–1000 mL per preparation
Fragment size	300 bp–approx. 50 kbp
Elution volume	50–200 µL
Preparation time	40 min for KingFisher® Flex (excl. filtration and sample lysis)
Theoretical binding capacity*	0.4 µg/µL beads

Procedure

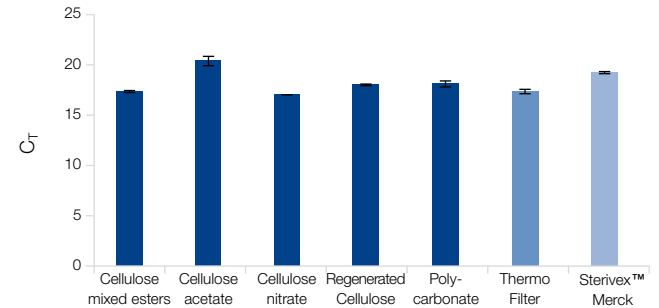


Application data



Efficient detection for different water and air samples

Various water samples and an air sample were filtered and the extracted DNA was analyzed by PCR. Microbial DNA could be efficiently measured for all of the samples, demonstrating the versatility of the NucleoMag® DNA/RNA Water kit.



Compatibility with different filtration systems

A qPCR was performed with nucleic acids isolated from round filters and a filtration cartridge system, demonstrating reliable results across different filtration systems.

Ordering information

Specification	Pack of	REF
NucleoMag® DNA/RNA Water	1 × 96/ 4 × 96 preps	744220.1 / .4
NucleoSpin® Bead Tubes Type A	50 preps	740786.50
NucleoSpin® Bead Tubes Type A 5 mL	50 preps	740799.50
MN Bead Tube Holder	1	740469
MN Bead Tube Holder 5 mL	1	740459

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