Bioanalysis

MACHEREY-NAGEL

RNA purification from soil

NucleoBond® RNA Soil

- Anion exchange technology to optimize RNA yield and purity – suitable for metagenomic studies
- Combination of mechanical homogenization and chemical lysis allows processing of large sample amounts
- Parallel preparation of RNA and DNA in one hour

RNA purification from soil

NucleoBond® RNA Soil

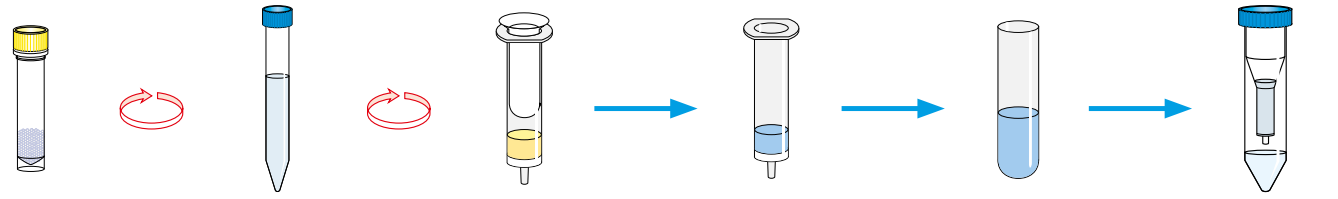
Easy handling and superior speed for metagenomic soil analysis

NucleoBond® RNA Soil kit enables efficient isolation of high quality RNA and DNA (requires DNA Set for NucleoBond® RNA Soil, see ordering information) from any kind of soil or sediment sample. Most soils contain relatively low amounts of RNA, compared to DNA. Therefore we designed our new kit with our proven NucleoBond® technology to enable high sample input and and pure nucleic acids. With our NucleoSpin® Bead Tubes Type A, the optimized Lysis Buffer, and Phenol:Chloroform:Isoamylalcohol an efficient sample disruption is ensured. The optional Buffer OPT enables efficient RNA and DNA purification from mineralic and organic soil samples.

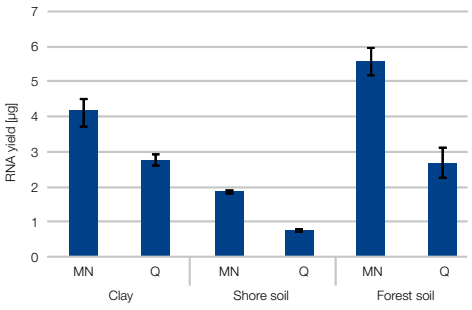
Product at a glance

Technology	Anion exchange chromatography, gravity flow columns combined with NucleoSpin® Bead Tubes Type A
Format	Gravity flow columns
Sample material	< 2 g of soil
Fragment size	≥ 100 nt
Typical yield	1–10 µg
A_{260}/A_{280}	1.7–2.1
RIN	> 8.5
Elution volume	100 µL
Binding capacity	600 µg
Processing time	60 min/6 preps

Procedure

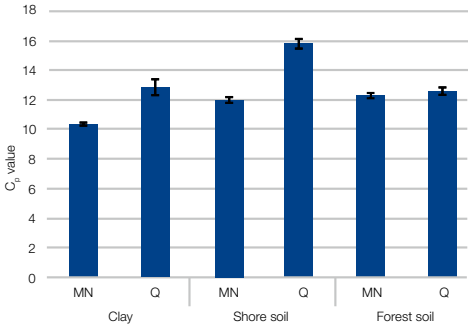


Application data



High RNA yields with NucleoBond® RNA Soil

Different soil samples (clay, shore soil, forest soil) were purified in duplicates according to the standard procedure. For comparison, the samples were applied to a competitor kit from Q. RNA was eluted in 100 µL and determined photometrically. NucleoBond® RNA Soil convinced due to the high RNA yield.



Amplifiable RNA for perfect results with NucleoBond® RNA Soil kit

Duplicates of different soil samples (clay, shore soil, forest soil) were purified in duplicates according to the standard procedure from MN and Q. 4 µL of eluate was applied to the RT-PCR (amplicon: 466 bp). All MN samples showed lower CP values compared with Q samples, indicating higher RNA yield.

Ordering information

Product	Preps	REF
NucleoBond® RNA Soil	20	740140.20
Related products		
DNA Set for NucleoBond® RNA Soil	20	740141.20
NucleoSpin® Bead Tubes Type A	50	740786.50
MN Bead Tube Holder	1	740469

www.mn-net.com

MACHEREY-NAGEL

MACHEREY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6–8 · 52355 Düren · Germany

DE / International:
Tel.: +49 24 21 969-0
Fax: +49 24 21 969-199
E-mail: info@mn-net.com

CH:
Tel.: +41 62 388 55 00
Fax: +41 62 388 55 05
E-mail: sales-ch@mn-net.com

FR:
Tel.: +33 388 68 22 68
Fax: +33 388 51 76 88
E-mail: sales-fr@mn-net.com

US:
Tel.: +1 484 821 0984
Fax: +1 484 821 1272
E-mail: sales-us@mn-net.com