

MACHEREY-NAGEL

RNA purification from stool

Bioanalysis



NucleoSpin® RNA Stool

- Combination of mechanical homogenization and chemical lysis ensures optimized RNA yield, including small RNA
- Isolated RNA does not show any PCR inhibition due to NucleoSpin® Inhibitor Removal Columns
- Suitable for various human and animal stool samples

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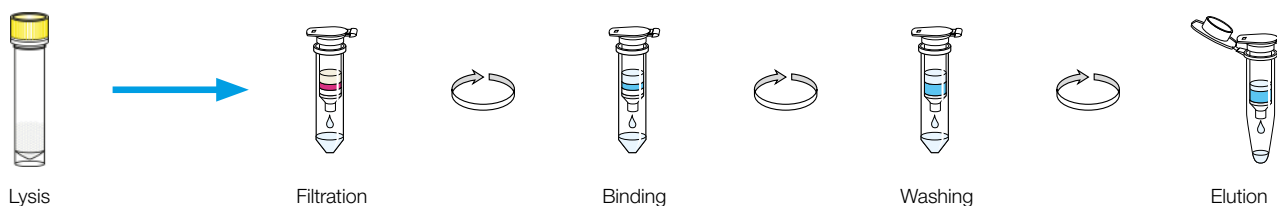
Speedy isolation of total RNA from various stool specimens

NucleoSpin® RNA Stool kit enables efficient isolation of high quality RNA from any kind of stool sample. The kit combines NucleoZOL and a specific Lysis Buffer for a chemical disruption of stool samples. The containing microbes are disrupted with a mechanical lysis using the included NucleoSpin® Bead Tubes Type A. The optimized workflow ensures a fast isolation of high quality RNA including small RNA.

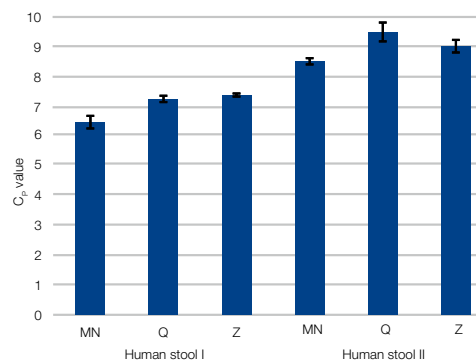
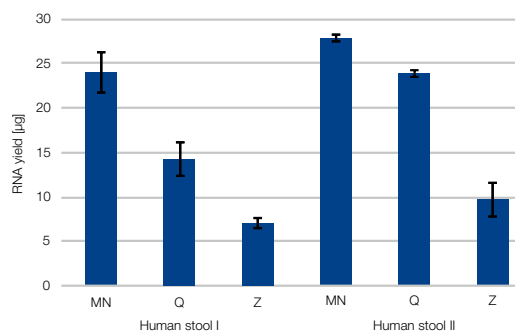
Product at a glance

Technology	Silica membrane technology combined with NucleoSpin® Bead Tubes Type A
Format	Mini spin columns
Sample material	Fresh or frozen stool samples
Fragment size	≥ 18 nt
Typical yield	10–30 µg
A_{260}/A_{280}	1.9–2.1
RIN	> 7.5
Elution volume	100 µL
Processing time	70 min/10preps

Procedure



Application data



Highest yield with NucleoSpin® RNA Stool

Two human stool samples (250 mg; MN only 200 mg) were processed in triplicates following the standard protocols including the DNase digestion step. The Q protocol was performed including the optional phenol based lysis step. Each eluate was used for UV spectroscopy to determine yield. The NucleoSpin® RNA Stool kit showed the highest RNA yield for the human stool samples.

NucleoSpin® RNA Stool shows best performance in qPCR

The NucleoSpin® RNA Stool samples as well as the Q samples were eluted with 100 µL, the Z eluate was adjusted to 100 µL to get comparable RNA concentrations in the eluate. 1 µL of eluate was used for qRT-PCR performed on a Roche® LightCycler® using the SensiFAST™ SYBR® No-Rox One Step Kit (amplicon size 466 bp). NucleoSpin® RNA Stool kit showed a better performance in the qRT-PCR compared to the two competitor kits.

Ordering information

Product	Preps	REF
NucleoSpin® RNA Stool	10/50	740130.10/.50
Related products		
NucleoZOL	200 mL	740404.200
NucleoSpin® Bead Tubes Type A	50	740786.50
MN Bead Tube Holder	1	740469

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Management System
EN ISO 13485:2016
ISO 9001:2015

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