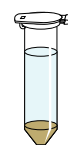


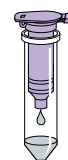
Optimized DNase I digest by use of MDB DNA removal you can see NucleoSpin® RNA II

Features / Applications NucleoSpin® RNA II

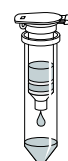
- ✓ **NucleoSpin® Filters included** for homogenization and reduction of lysate viscosity
- ✓ **MDB (Membrane Desalting Buffer) included** for optimized DNase I digest
- ✓ **DNase I included** for removal of genomic DNA
- ✓ average yield: up to 70 µg ready-to-use total RNA
- ✓ purity $A_{260/280}$: 1.9-2.1
- ✓ binding capacity: 100 µg RNA
- ✓ elution volume: 40 - 120 µl (default volume: 60 µl)
- ✓ time/prep: < 30 min/6 preps
- ✓ RNA from up to 5 x 10⁶ cultured cells
30 mg tissue
- ✓ RNA suitable for all common downstream applications,
e.g. RT-PCR, TaqMan analysis, blotting, or microarray analysis



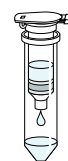
lysis



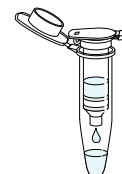
homogenization
by filtration
(NucleoSpin® Filter)



binding



MDB-wash
DNase I incubation
directly on the
membrane at RT
washing



elution

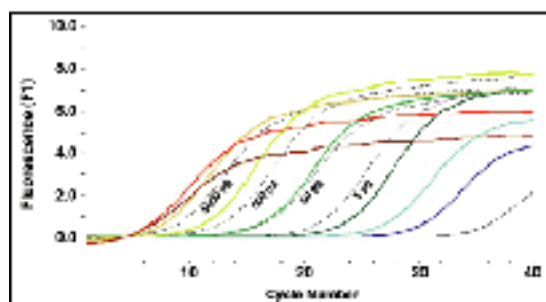


RT-PCR, Northern blotting, array technology,
RNase protection assays, primer extension

Accurate RT-PCR results

Total RNA from the indicated numbers of HeLa cells has been purified according to the standard protocol and was detected by RT-PCR (2 µl of the 100 µl eluate, primers specific for GAPDH). Even from very small amounts of cells amplifiable RNA was isolated.

— 2 x 10⁶ cells, — 1 x 10⁶ cells, — 1 x 10⁵ cells,
— 1 x 10⁴ cells, — 1,000 cells, — 100 cells, — 10 cells,
— 1 cell, — water. Standards: gDNA (amount as indicated).

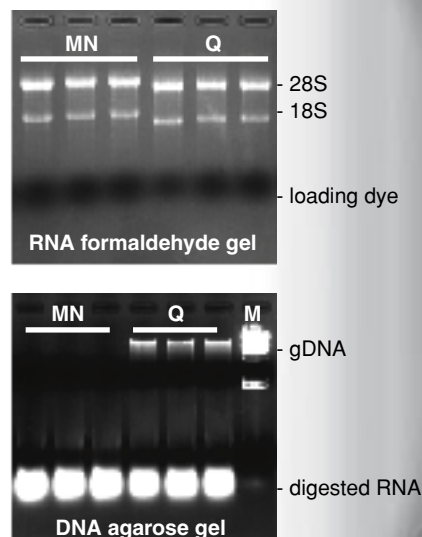


Even from as little as 10 cells RT-PCR detectable RNA can be isolated.

DNA removal you can see

A: Total RNA was purified from 10^6 HeLa cells using the NucleoSpin[®] RNA II kit in comparison to competitor Q. 10 μ l of each eluate (elution volume 50 μ l) were analyzed on a 1.2 % formaldehyde gel. The $A_{260/280}$ was on average 2.1.

Due to a lower detection sensitivity of genomic DNA in a denaturing formaldehyde gel contaminating genomic DNA is often not visible.



B: For visualization of residual genomic DNA 10 μ l of each eluate were treated with RNase A and subsequently loaded onto a 1% TAE agarose gel. The NucleoSpin[®] RNA II kit contains DNase I for on-column digestion.

M: λ HindIII, MBI-Fermentas

Optimized DNase I treatment eliminates genomic DNA in NucleoSpin[®] RNA II preparations whereas a clear distinct band of contaminating genomic DNA is visible in RNA samples prepared with a kit of competitor Q.

Related RNA Purification Kits

- NucleoSpin[®] RNA L** midi spin columns for isolation of up to 400 μ g of total RNA from up to 200 mg tissue or 5×10^7 cells, **NucleoSpin[®] Filters L included, DNase I included, MDB included**
- NucleoSpin[®] 8/96 RNA** fully automatable 8-well or 96-well system for isolation of up to 100 μ g total RNA (centrifuge processing) from up to 40 mg tissue or 1×10^7 cells, **DNase I included**, NucleoSpin[®] 96 RNA Filter Plate available separately
- NucleoSpin[®] RNA Plant** mini spin columns for isolation of up to 70 μ g of total RNA from up to 100 mg plant tissue, **two alternative lysis buffers included** for optimal processing of a large variety of plant species, **NucleoSpin[®] Filters included, DNase I included, MDB included**
- NucleoTrap[®] mRNA** oligo(dT) latex beads for isolation of up to 40 μ g mRNA from about 1000 μ g total RNA (refers to midi kit)

Ordering Information

Catalogue No	Description	Preps	Specification
NZ74095520	NucleoSpin [®] RNA II	20	mini spin columns
NZ74095550	NucleoSpin [®] RNA II	50	mini spin columns
NZ74095250	NucleoSpin [®] RNA II	250	mini spin columns
NZ74096220	NucleoSpin [®] RNA L	20	midi spin columns
NZ740698	NucleoSpin [®] 8 RNA	12 / 60 x 8	8-well strips
NZ7407092	NucleoSpin [®] 96 RNA	2 x 96	96-well plates
NZ7407094	NucleoSpin [®] 96 RNA	4 x 96	96-well plates
NZ74070924	NucleoSpin [®] 96 RNA	24 x 96	96-well plates
NZ74094920	NucleoSpin [®] RNA Plant	20	mini spin columns
NZ74094950	NucleoSpin [®] RNA Plant	50	mini spin columns
NZ740949250	NucleoSpin [®] RNA Plant	250	mini spin columns
NZ740655	NucleoTrap [®] mRNA mini	12	latex beads
NZ740656	NucleoTrap [®] mRNA midi	12	latex beads

Note...

- ✓ For comprising data on our DNA and RNA purification products please ask for our catalogue **Bioanalysis 2006**

Total RNA Isolation - NucleoSpin[®] RNA kits