

NucleoSpin® RNA XS

Get highly concentrated RNA from smallest samples!

NucleoSpin® RNA XS

Rapid purification of total RNA
from **Xtra Small** samples

NucleoSpin® RNA XS is designed for total RNA isolation out of **Xtra Small** samples like microdissected tissue or small amounts of cells.

Based on the reliable silica membrane technology NucleoSpin® RNA XS is overcoming the limitations of conventional kits by an innovative new column design: A funnel-shaped thrust ring is holding a silica membrane of small diameter. This set-up allows accurate dispensing of small volumes onto the membrane and results in a reduced elution volume of only 5 – 20 µl. The high RNA yield achieved with NucleoSpin® RNA XS together with the small elution volume lead to highly concentrated RNA – free of impurities and suitable for sensitive downstream applications.

elution volume:
Xtra Small
- concentration:
Xtra High
- downstream:
Xtra Sensitive

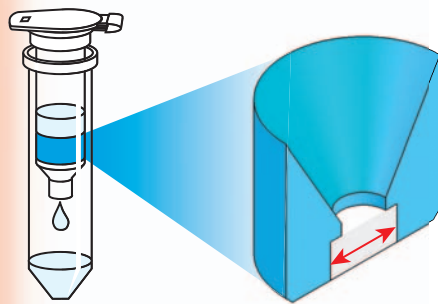
- ✓ for smallest samples
- ✓ elution in only 5 – 20 µl
- ✓ DNase included
- ✓ high purity

...get RNA from a single cell
or only 0.1 mg tissue

...highly concentrated RNA for
sensitive downstream applications

...for optional timesaving
on-column DNA removal

...ready-to-use for RT PCR



New column design – increased sensitivity

The innovative new funnel-shaped thrust ring allows standard mini prep spin columns to hold a silica membrane of very small diameter.

The small surface of the NucleoSpin® RNA XS membrane allows efficient elution in only 5 – 20 µl resulting in highest RNA concentrations ready for all typical downstream applications.

➤ better results from small samples

The ideal solution for the analysis of samples as small as:

tissue: 0.1 – 5 mg (e.g. laser microdissections, biopsy material, cryosections)

cells: 1 – 500,000 (e.g. cultured cells, stem cells)

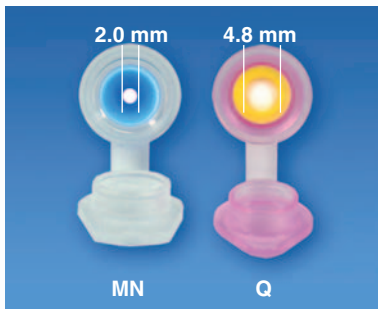
plant

material: 3 – 30 mg (e.g. stem, leaves, roots)

MACHERY-NAGEL
www.mn-net.com

BIOKÉ
sharing knowledge
Plesmanlaan 1d
2333 BZ Leiden
The Netherlands
T. +31 (0)71 568 10 00
T. Belgium: 0800 71640
F. +31 (0)71 568 10 10
info@bioke.com
www.bioke.com





Elution volume depends on membrane diameter

MACHEREY-NAGEL (MN):

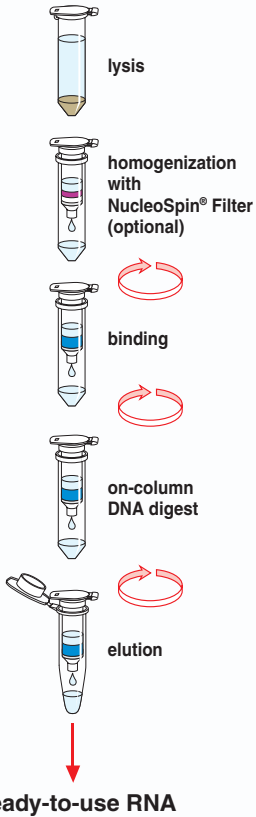
The **Xtra Small** diameter of the **NucleoSpin® RNA XS** membrane allows efficient elution in as little as 5 µl RNase-free water.

Competitor Q:

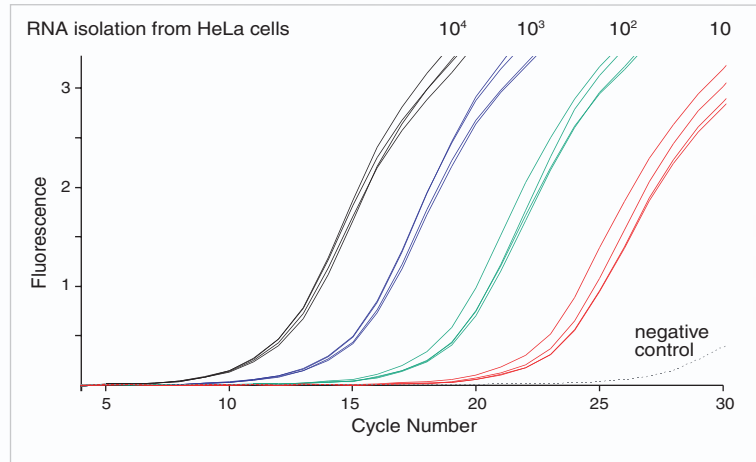
The kit designed for very small samples does not have optimized column features for the desired application. Therefore elution in higher volumes (10 – 14 µl) is necessary.

► **get the high RNA concentration you need ... with NucleoSpin® RNA XS**

NucleoSpin® RNA XS Procedure



Reliable sensitivity - constant high yields



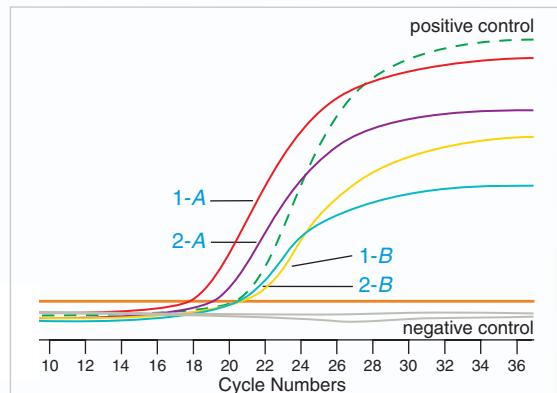
Total RNA was extracted from 10^4 (black), 10^3 (blue), 10^2 (green) and 10 (red) HeLa cells using **NucleoSpin® RNA XS**. Elution was performed in 10 µl, of which 2 µl were subjected to a one-tube, one-step qRT-PCR. **NucleoSpin® RNA XS** allows efficient isolation from sample amounts over several orders of magnitude, down to few cells.

NucleoSpin RNA® XS combines reliable high sensitivity with reproducible high yields.

Wide variety of applications – reliable results

RNA was isolated from paranasal sinus carcinoma with **NucleoSpin® RNA XS**: Cryosections (1) and sections of tissue treated with RNA^{later}® (2) served as sample material, sample size was 10 µm x 55 mm². The RNA was reverse transcribed with two different commercial kits, one with random primers (A) and one with oligo-dT primers (B). Subsequent β-Actin qPCR was performed with a SYBR® Green qPCR Kit on an iCycler™ (Bio-Rad).

NucleoSpin® RNA XS showed positive results on all systems with Ct values between 17.6 and 21.1.



Data kindly provided by Dipl.-Biol. Monika Gramann, HNO Klinik, Kopf- und Halschirurgie, Universitätsklinikum Erlangen

Ordering Information:

NucleoSpin® RNA XS
(10/50/250 preps)

Cat. No.

740 902.10 / .50 / .250

Distributed by:

For more information regarding the use of MN products, please contact your local representative or visit MN directly: www.mn-net.com.

MACHEREY-NAGEL

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

Germany
Tel.: +49 (0) 2421 969-270
e-mail: tech-bio@mn-net.com

USA
Tel.: +1 484 821 09 84
e-mail: sales-us@mn-net.com

France
Tel.: +33 (0) 388 682268
e-mail: sales-fr@mn-net.com

Switzerland
Tel.: +41 (0) 62 388 55 00
e-mail: sales-ch@mn-net.com

NucleoSpin® RNA XS

NucleoSpin RNA XS-Flyer-ent1/25/09-2007 PD KATEN000043 / Printed in Germany

