Get highly concentrated DNA from small samples!

NucleoSpin® Tissue XS

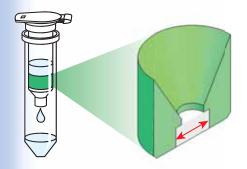
Rapid purification of genomic, bacterial, and viral DNA from Xtra Small samples

NucleoSpin® Tissue XS is designed for DNA isolation out of Xtra Small samples like microdissected tissue, small blood samples, or small amounts of cells. Based on the reliable silica membrane technology NucleoSpin® Tissue 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. It allows accurate dispensing of small volumes on the membrane and a reduced elution volume of only 5 – 30 µl. The high DNA yield achieved with NucleoSpin® Tissue XS and the small elution volume lead to highly concentrated DNA – free of impurities and suitable for sensitive downstream applications.

Features

- ✓ optimized column design
- ✓ silica membrane technology
- ✓ high purity
- ✓ elution in only 5 30 µl
- ...reduced membrane area
- ...known for high reliability
- ...ready-to-use for real-time PCR
- ...gives you highly concentrated DNA for sensitive downstream applications

elution volume:



New column design – unique advantages

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® Tissue XS** membrane allows efficient elution in only $5-30~\mu l$ resulting in highest DNA concentrations ready for all typical downstream applications.

increased sensitivity, better results from small samples

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

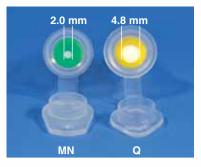
tissue: 0.025 – 10 mg (e.g. microdissected tissue, FFPE tissue)

blood: 1 – 30 μl of fresh, frozen, stabilized blood

cells: 10 - 10,000 cultured cells

Optimal for dried blood spots, forensic samples, buccal swabs ...and others





Elution volume depends on membrane diameter

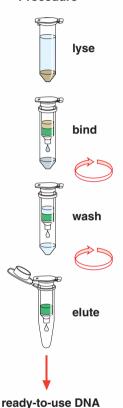
MACHEREY-NAGEL (MN):

The Xtra Small diameter of the NucleoSpin® Tissue XS membrane allows efficient elution in only 5 - 30 µl.

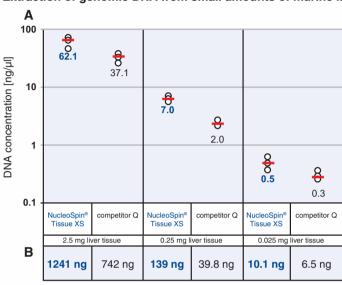
The kit designed for very small samples does not have optimized column features for the desired application. Therefore elution in high volume (20 – 100 µl) is necessary.

get the high DNA concentration you need ... with NucleoSpin® Tissue XS

NucleoSpin® Tissue XS **Procedure**



Extraction of genomic DNA from small amounts of murine liver



Genomic DNA was purified from small amounts of murine liver tissue using NucleoSpin® Tissue XS and a competitor kit especially designed for very small sample amounts. With both kits DNA was eluted in 20 µl elution buffer. The DNA was subsequently subjected to LightCycler™ analysis.

NucleoSpin® Tissue XS is superior in both: higher DNA concentration (A) and higher total yield (B). With NucleoSpin® Tissue XS, the DNA concentration can even be further increased by using smaller elution volumes down to 5 µl. The smallest default elution volume of the competitor kit is 20 ul.

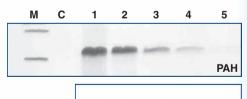
Highest DNA concentration and highest total yield can be obtained with NucleoSpin® Tissue XS

DNA purification from microdissected, formalin fixed paraffin-embedded (FFPE) Tissue

DNA was purified from microdissected FFPE colon cancer tissue with NucleoSpin® Tissue XS. Sample sizes were 1 mm², 0.5 mm², 0.25 mm², 0.125 mm², and 0.065 mm² of a 4 μ m slice. The isolated DNA was directly subjected to PCR with PAH and K-ras specific primers.

NucleoSpin® Tissue XS allows purification of amplifiable DNA even from very small samples of FFPE tissue.

Data kindly provided by S. Staeck, Dr. D. Kuester, Dr. A. Poehlmann and Prof. R. Schneider-Stock, Department of Pathologie, Molecular Genetics, University of Magdeburg, Germany.



K-ras

M: DNA ladder

C: negative control without DNA 1: 1 mm2

2: 0.5 mm²

3: 0.25 mm² 4: 0.125 mm² 5: 0.065 mm²

Ordering Information:

NucleoSpin® Tissue XS (10/50/250 preps)

740 901.10 / .50 / .250

Cat. No. 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 France

Tel.: +49 (0) 2421 969-270 e-mail: tech-bio@mn-net.com Tel.: +1 484 821 09 84 e-mail: sales-us@mn-net.com

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



