NucleoSpin® RNA/Protein

RNA and Protein from one Lysate

undivided samples parallel isolation

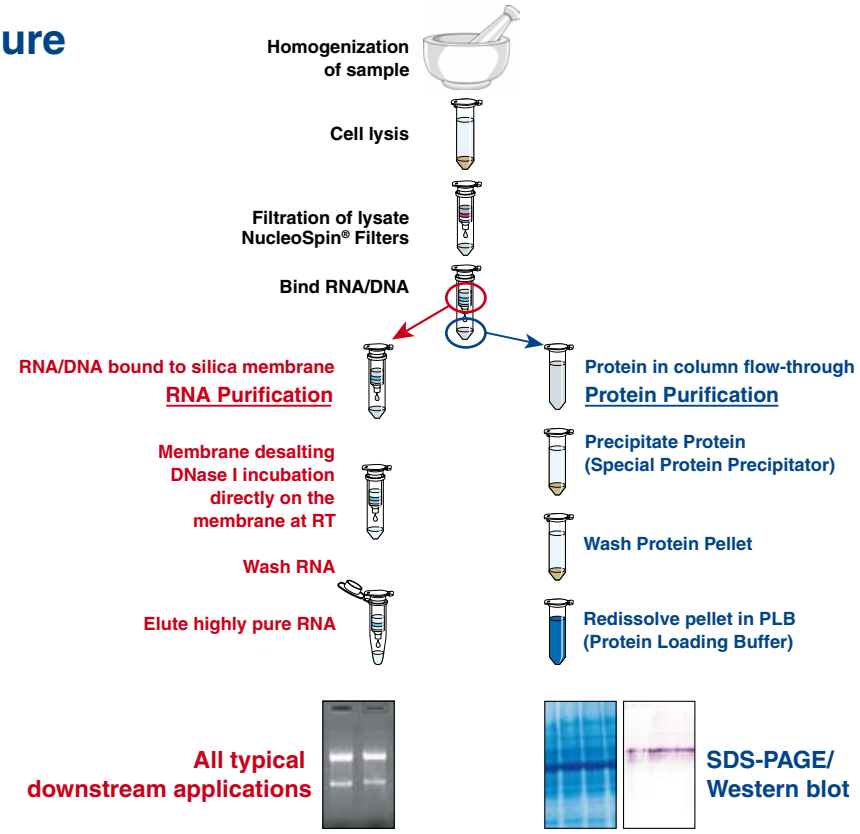
NucleoSpin® RNA/Protein

Rapid Purification of total RNA and Protein from Cells and Tissue

Studies of gene expression on transcriptional and translational level are often complicated by small sample sizes and incompatible techniques for RNA and protein isolation.

The **NucleoSpin® RNA/Protein Kit** enables the parallel isolation of RNA and protein from one lysate and a broad variety of starting materials.

Procedure



Features

✓RNA and Protein from one lysate

simple and fast procedure: no phenol, no chloroform, no acetone

✓High quality RNA

RNA is suitable for all common downstream applications e.g. RT-PCR, TaqMan®, blotting, or microarray

✓High Protein yield

high protein concentration, suitable for SDS-PAGE and Western blot analysis

✓Parallel DNA purification possible

parallel DNA purification is possible in combination with the optional NucleoSpin® RNA/DNA buffer set

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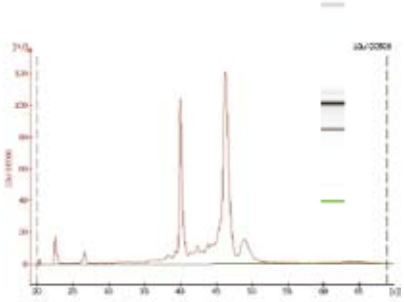
Applications

✓ **gene expression profiling on transcription and translation levels**

Application data

High quality of RNA

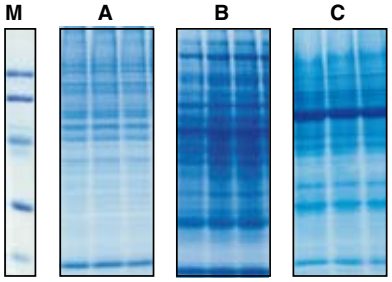


Sample material:
10^6 HeLa cells

Elution was done using 100 µl RNase free water, 10 µl were analyzed on Agilent Bioanalyzer according to the standard protocol.

High quality of RNA proven by Bioanalyzer analysis!

Quantitative Protein Isolation

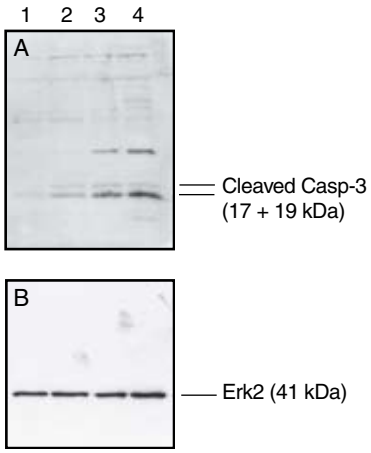


Sample material:
A: 10^6 HeLa cells
B: 30 mg liver
C: 100 mg garden cress seedlings

Just 1.4 % of the total isolated protein loaded per lane!

This corresponds to protein from 14 000 HeLa cells (A), 0.43 mg liver (B), and 1.43 mg garden cress seedling (C), respectively per lane.

NucleoSpin® RNA/Protein procedure results in sufficient protein for SDS PAGE analysis



Expression analysis of cleaved caspase-3 and Erk2 in carcinoma cell lines upon treatment with an apoptosis inducing DNA damaging agent
Sample material: carcinoma cell line
Sample amount: approx. one million cells
Precipitated volume of column flow-through for protein isolation: 200 µl
Protein resolubilization volume: 200 µl PLB
Sample volume loaded per lane: 16 µl
A: Western-blot probed with anti-cleaved caspase-3
B: Western-blot probed with anti-Erk2

1: untreated
2: 24 h upon treatment
3: 48 h upon treatment
4: 120 h upon treatment

Data was kindly provided by
Steffen Naumann and Prof. B. Kaina,
Department of Toxicology,
University of Mainz, Germany

Visualization of changes in protein level possible!

Ordering Information

Catalogue No	Description	Quantity
NZ74093310	NucleoSpin® RNA/Protein	10 preps
NZ74093350	NucleoSpin® RNA/Protein	50 preps
NZ740933250	NucleoSpin® RNA/Protein	250 preps
NZ740944	NucleoSpin® RNA/DNA buffer set	100 preps

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