# MACHEREY-NAGEL

# RNA purification from cells and tissue



- Developed for extra small samples down to single cell analysis
- gDNA removal column to omit time consuming DNA digestion
- Novel lysis buffer without β-mercapthoethanol or TCEP



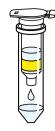
## RNA purification from cells and tissue

#### The new standard for RNA isolation from extra small samples

NucleoSpin® RNA Plus XS enables efficient isolation of high quality RNA from extra small (XS) amounts of cells and tissue. The included NucleoSpin gDNA Removal Column XS allows enzyme free DNA removal, saving 15 min prep time compared to classical DNA digestions. NucleoSpin® RNA Plus XS contains a novel lysis buffer chemistry to omit reducing agents like β-mercapthoethanol or TCEP avoiding unpleasant smells and health hazards.

### Product at a glance

| Technology                         | Silica-membrane technology  |  |
|------------------------------------|---|--|
| Format                             | Two column silica membrane system, XS column for DNA removal and XS column for RNA isolation  |  |
| Sample material                    | Cultured cells (1–10 <sup>5</sup> ), Human/animal tissue (< 5 mg)   |  |
| Typical yield                      | HeLa cells ( $10^5$ ): 0.5–2 μg, HeLa cells ( $10^1$ ): 0.05–0.2 ng, Mouse liver (0.5 μg): 2.5–8 ng, Mouse brain (0.5 μg): 0.1–0.5 ng |  |
| Elution volume                     | 5–30 μL   |  |
| A <sub>260</sub> /A <sub>280</sub> | 1.9–2.2   |  |
| Preparation time                   | 18 min/6 preps  |  |
| Binding capacity                   | 110 µg  |  |



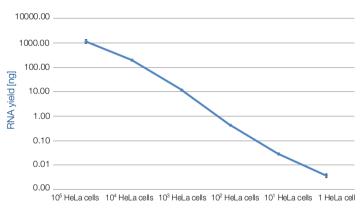
NucleoSpin® gDNA Removal Column XS allows DNA removal without digestion



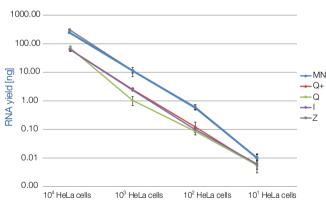
NucleoSpin® RNA Plus XS Column allows elution volumes down to 5 µL

#### Application data

#### A) Reliable RNA isolation allows single cell analysis



#### B) Competitive RNA yield in comparison to competitors



NucleoSpin® RNA Plus XS enables reliable isolation of high quality RNA from extra small samples down to a single cell in outstanding quality.

A) RNA was isolated from HeLa cells (10<sup>5</sup> to 1 cell) using NucleoSpin® RNA Plus XS. RNA was analyzed by qRT-PCR. B) RNA was isolated from HeLa cells (10<sup>4</sup> to 10<sup>1</sup> cells) with NucleoSpin® RNA Plus XS (MN) and four competitor products (Q+, Q, I, Z). RNA was analyzed by qRT-PCR.

#### Ordering Information

| Product                           | Preps     | REF                |
|-----------------------------------|-----------|--------------------|
| NucleoSpin® RNA Plus XS           | 10/50/250 | 740990.10/.50/.250 |
| NucleoSpin® RNA Plus              | 10/50/250 | 740984.10/.50/.250 |
| NucleoZOL                         | 200 mL    | 740404.200         |
| Related Products                  |           |                    |
| NucleoSpin® RNA Set for NucleoZOL | 50        | 740406.50          |

www.mn-net.com

#### **MACHEREY-NAGEL**



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