

## NucleoSpin<sup>®</sup> RNA – isolation of RNA from difficult-to-lyse tissue (Rev. 01)

This protocol is only a supplement to the kit's general user manual. Please refer to the kit manual for more detailed information regarding safety instructions, product-specific disclaimers, and especially preparations needed before starting the procedure. The latest version of the user manual is available at **www.mn-net.com/usermanuals** or can be requested from our technical service (tech-bio@mn-net.com). Material safety data sheets (MSDS) can be downloaded from **www.mn-net.com/MSDS**.

This support protocol has been developed for RNA isolation from 'difficult' tissues using the NucleoSpin<sup>®</sup> RNA kit to improve RNA yield and quality when isolating RNA from difficult-to-lyse tissues (e.g., cerebellum, heart, or skeletal muscle).

- Add 400 μL Buffer RA1 to the sample. Homogenize with NucleoSpin<sup>®</sup> Filter, homogenizer, or syringe / needle method.
- 2 Centrifuge at 14,000 x g for 5 min to remove debris.
- **3** Carefully transfer supernatant to a new 1.5 mL tube. Avoid pipetting pelleted material.
- 4 Add 300 µL ethanol (96–100 %) to the sample, mix very well by vortexing.
- 5 Centrifuge at 14,000 x g for 10 min. Discard as much supernatant as possible.
- 6 Air-dry 5 min.
- 7 Add 25 µL RNase-free water to the pellet and resuspend completely.
- 8 Add 375 μL Buffer RA1, mix by pipetting and light vortexing.

Continue with step 4 of the standard protocol.

