

NucleoSpin® NucleoSpin RNA Plant and Fungi (Rev. 01, June 2018)

NucleoSpin® RNA Plant and Fungi for fatty or lipid rich fruit material

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). Safety data sheets (SDS) can be downloaded from www.mn-net.com/MSDS.

NucleoSpin® RNA Plant and Fungi for fatty or lipid rich fruit material

Before starting with the preparation, set incubator or water bath to 56 °C.

Optimal RNA yields from fruit samples can be obtained by using Paraffin Dissolver (REF 740968.25).

1 Homogenize sample

Add 500 µL Buffer PFL into NucleoSpin® Bead Tube Type G.

Add 20 µL Buffer PFR to the tube.

Add **500 µL Paraffin Dissolver** to the tube (optional, for ease of handling).

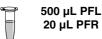
Transfer sample (50 mg oil palm fruit flesh or 50 mg avocado fruit flesh) to the NucleoSpin® Bead Tube Type G.

Place the Bead Tube into a swing-mill and agitate for 30 sec at 30 Hz until the sample is disintegrated.

Incubate NucleoSpin® Bead Tube Type G for **5 min** at **56°C**.

Transfer the lysate into a fresh 2 mL tube (not provided).

Centrifuge 1 min at $20,000 \times g$ in oder to sediment cell debris and to achieve phase separation. Alternatively, centrifuge 3 min at $14,000 \times g$.



Optional: 500 µL Paraffin Dissolver



Agitate 30 s

_g 56 °C, 5 min



20,000 x *g*, 1 min



2 Filter Lysate

Insert a NucleoSpin® RNA Plant and Fungi Filter Column (green ring) into a Collection Tube (2 mL, provided).

Load the RNA containing lower aqueous phase (approximately $300-400~\mu L$) from step 1 onto the column. Do not load the upper lipid (Paraffin Dissolver) phase as well as sedimented cell debris onto the column.



Load aqueous phase



14,000 x *g*,

Centrifuge for 1 min at 14,000 x g.

3 Adjust RNA binding conditions

Add $500~\mu\text{L}$ Buffer PFB to the flow through and mix by pipetting.



500 μL PFB

Incubate for **5 min** at **room temperature**.

RT, 5 min

4 Bind RNA

For further steps, please follow the standard protocol (please see page 16, chapter 5.1, step 4).