

# Quick-Start Protocol

## miRNeasy FFPE Kit – Part 2

March 2016

Refer to *Quick-Start Protocol: miRNeasy FFPE Kit – Part 1* for instructions about kit storage and reagent preparation.

### Further information

- *miRNeasy FFPE Handbook*: [www.qiagen.com/HB-0374](http://www.qiagen.com/HB-0374)
- Safety Data Sheets: [www.qiagen.com/safety](http://www.qiagen.com/safety)
- Technical assistance: [support.qiagen.com](http://support.qiagen.com)

### Notes before starting

- ▲ indicates volumes to use if processing 1–2 sections per sample, while ● indicates volumes to use if processing >2 sections per sample.
- Perform steps 1–12 detailed in the *Quick-Start Protocol: miRNeasy FFPE Kit – Part 1*. Next, proceed to step 13 below.

13. Add DNase Booster Buffer equivalent to one tenth of the total sample volume (approximately ▲ 16 µl or ● 25 µl) and 10 µl DNase I stock solution. Mix by inverting the tube. Centrifuge briefly.

14. Incubate at room temperature for 15 min.

15. Add ▲ 320 µl or ● 500 µl Buffer RBC and mix the lysate thoroughly.

16. Add ▲ 1120 µl or ● 1750 µl ethanol (100%) to the sample, and mix well by pipetting. Do not centrifuge. Proceed immediately to step 17.

17. Transfer 700  $\mu$ l of the sample, including any precipitate, to an RNeasy<sup>®</sup> MinElute<sup>®</sup> spin column placed in a 2 ml collection tube (supplied). Close the lid gently, and centrifuge for 15 s at  $\geq 8000 \times g$  ( $\geq 10,000$  rpm). Discard the flow-through.\*

Reuse the collection tube in step 18.

18. Repeat step 17 until the entire sample has passed through the column.

Reuse the collection tube in step 19.

19. Add 500  $\mu$ l Buffer RPE to the column. Close the lid gently, and centrifuge for 15 s at  $\geq 8000 \times g$  ( $\geq 10,000$  rpm). Discard the flow-through.

Reuse the collection tube in step 20.

20. Add 500  $\mu$ l Buffer RPE to the column. Close the lid gently, and centrifuge for 2 min at  $\geq 8000 \times g$  ( $\geq 10,000$  rpm). Discard the collection tube with the flow-through.

After centrifugation, carefully remove the column from the collection tube so that the column does not contact the flow-through. Otherwise carryover of ethanol will occur.

21. Place the RNeasy MinElute spin column in a new 2 ml collection tube (supplied). Open the lid of the spin column, and centrifuge at full speed for 5 min. Discard the collection tube with the flow-through.

22. Place the RNeasy MinElute spin column in a new 1.5 ml collection tube (supplied). Add 14–30  $\mu$ l RNase-free water directly to the spin column membrane. Close the lid gently, and centrifuge for 1 min at full speed to elute the RNA.

Elution with smaller volumes of RNase-free water leads to higher total RNA concentrations, but lower RNA yields. The dead volume of the RNeasy MinElute spin column is 2  $\mu$ l: elution with 14  $\mu$ l RNase-free water results in a 12  $\mu$ l eluate.

\* Flow-through contains Buffer RBC and is therefore not compatible with bleach. See “Safety Information” section in the *miRNeasy FFPE Handbook*.



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