March 2016

## exoRNeasy Serum/Plasma Maxi Kit, Part I: Vesicle Isolation

The exoRNeasy Serum/Plasma Maxi Kit (cat. no. 77064) is shipped at ambient temperature. Store the RNeasy® MinElute® spin columns immediately at 2–8°C. Store the miScript® Primer Assay at -30 to -15°C. QIAzol® Lysis Reagent can be stored at room temperature (15–25°C) or at 2–8°C. Store the remaining components dry at room temperature. All kit components are stable for at least 9 months under these conditions if not otherwise stated on label.

## Further information

- exoRNeasy Serum/Plasma Handbook: www.qiagen.com/HB-1779
- Safety Data Sheets: www.qiagen.com/safety
- Technical assistance: support.qiagen.com

## Notes before starting

- This protocol is for purifying exosomes and other extracellular vesicles (EVs) from 0.2 to 4 ml serum or plasma. The protocol to isolate total RNA, including small RNAs, from EVs is included in Part II.
- If necessary, redissolve any precipitate in Buffer RWT by warming.
- Except for phase separation (step 11), all steps should be performed at room temperature (15–25°C). Work quickly.
- Add ethanol (96–100%) to Buffer RWT and Buffer RPE concentrates before use (see bottle label for volume).
- The miRNeasy Serum/Plasma Spike-In Control (cat. no. 219610) must be purchased separately. For recommendations on how to prepare a working solution, see the exoRNeasy Serum/Plasma Handbook.



- It is recommended to only use pre-filtered plasma, excluding particles larger than 0.8 µm (e.g. using Sartorius® Minisart® NML (cat. no. 16592) or Millipore® Millex®-AA (cat. no. SLAA033SB) syringe filters).
- 2. Add 1 volume Buffer XBP to 1 volume of sample. Mix well immediately by gently inverting the tube five times.
- 3. Add the sample/Buffer XBP mix onto the exoEasy spin column and spin the device for 1 min at  $500 \times g$ . Discard the flow-through and place the column back into the same collection tube.
- 4. Add 10 ml Buffer XWP and spin 5 min at  $5000 \times g$  to wash the column and remove residual buffer. Discard the flow-through together with the collection tube.

**Note**: It is possible to reduce the steps performed at  $5000 \times g$  down to a minimum force of  $3000 \times g$  without performance loss.

- 5. Transfer the spin column to a fresh collection tube.
- 6. Add 700  $\mu$ l QIAzol to the membrane. Spin for 5 min at 5000 x g to collect the lysate and transfer completely to a supplied 2 ml tube.

Continue with Part II of the Quick-Start Protocol for the RNA isolation protocol, starting with Step 7.



Scan QR code for handbook.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual.

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