Quick-Start Protocol July 2018

QIAamp® MinElute® ccfDNA Mini Kit

Store the QIAamp UCP MinElute Column and Magnetic Bead Suspension at 2–8°C. Store the kit components dry at RT (15–25°C) unless label states otherwise.

Further information

- QIAamp MinElute ccfDNA Handbook: www.qiagen.com/HB-2366
- Safety Data Sheets: www.qiagen.com/safety
- Technical assistance: www.support.qiagen.com

Notes before starting

- Add isopropanol to Buffer ACB concentrate; add ethanol to Buffer ACW2 concentrates.
- Ensure thermomixer is RT (15–25°C) for step 3 and is 56°C for step 8.
- Resuspend Magnetic Bead Suspension by pulse-vortexing for 1 min. Do not let the suspension settle for more than 2 min. Pipet from the center of the suspension.

Procedure

1. Mix components (see table below) in a 15 ml tube; incubate 10 min at RT (15–25°C) while slowly shaking end-over-end.

Plasma (ml)	Magnetic Bead Suspension (µl)	Proteinase K (µl)	Bead Binding Buffer (µl)
1	30	55	150
2	60	110	300
3	90	165	450
4	120	220	600

2. Spin briefly (30 s at 200 x g) to remove any solution in cap. Place tube with bead solution on a 15 ml magnetic rack. Incubate at least 1 min, until solution is clear. Discard supernatant.



- 3. Remove tube from 15 ml magnetic rack. Add 200 µl Bead Elution Buffer to bead pellet; vortex. Pipet up and down to mix and rinse tube wall. Transfer bead mixture into Bead Elution Tube. Incubate 5 min on thermomixer at RT, 300 rpm.
- 4. Place Bead Elution Tube with bead solution on a 2 ml magnetic rack. Incubate at least 1 min, until solution is clear.
- Transfer supernatant into new Bead Elution Tube and discard bead pellet. Add 300 μl Buffer ACB to supernatant; vortex to mix. Briefly centrifuge tube.
- Apply mixture from step 5 to QIAamp UCP MinElute Column and centrifuge 1 min at 6000 x g. Place QIAamp UCP MinElute Column in a clean 2 ml collection tube, and discard flow-through.
- Add 500 µl buffer ACW2 to QIAamp UCP MinElute Column; centrifuge 1 min at 6000 x g. Place QIAamp UCP MinElute Column in a clean 2 ml collection tube; discard flow-through. Centrifuge 3 min at full speed (20,000 x g; 14,000 rpm).
- 8. Place QIAamp UCP MinElute Column in a clean 1.5 ml elution tube; discard 2 ml collection tube from step 7. Open lid; incubate 3 min at 56°C.
- Apply 20–80 μl Ultraclean water to membrane center. Close lid; incubate 1 min at RT.
 Centrifuge 1 min at full speed (20,000 x g; 14,000 rpm).
- **Note**: To maximize yield eluted in 20–80μl, reapply the eluate to the column for reelution. Place the QIAamp UCP MinElute Column in a clean 1.5 ml elution tube (not provided). Aspirate the eluate from the 1.5 ml elution tube from step 9 and reload it onto the center of the membrane. Close the lid, and incubate 1 min at RT. Centrifuge 1 min at full speed (20,000 x g; 14,000 rpm).

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

Trademarks: QIAGEN®, Sample to Insight®, QIAamp®, MinElute® (QIAGEN Group). Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law. 1114401 07/2018 HB2299.002 © 2018 QIAGEN, all rights reserved.