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ONA extraction from whole blood and buffy coat using the QIAamp DNA mini kit

Annika

Fendler¹

¹Charité - University Hospital



Annika Fendler

ABSTRACT

This protocol is for extraction of total RNA from whole blood, or buffy coat or PBMCs using the QIAamp DNA mini kit.

OPEN ACCESS



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Protocol status: Working We use this protocol and it's working. Tested by Bettina Ergün

Created: Jun 27, 2023

Last Modified: Jul 26, 2023

PROTOCOL integer ID: 84096

GUIDELINES

This kit is for \bot 400 μ L Whole blood or \bot 200 μ L

MATERIALS

QIAamp DNA Mini Kit Qiagen Catalog #51304

EtOH

PBS

1.5 and 2 ml LoBind tubes

BEFORE START INSTRUCTIONS

Prepare:

AW1: Add 25ml EtOH to new bottle AW2: Add 30 ml EtOH to new bottle

RNAse I stocks: 100 mg/ml

Preparation of whole blood or buffy coat

1 Select whole blood or buffy coat from biobank list and retrieve from storage location. Ensure that sample is correct by scanning the tube barcode and matching it with the biobank list.

1.1

Sample ID	Barcode	Sample Type	Volume used	Comment	DNA concentration

List of samples for DNA extraction



22m 30s

- Transfer $\underline{\mathbb{Z}}$ 200 μL buffy coat or $\underline{\mathbb{Z}}$ 400 μL whole blood in 1.5 ml collection tubes
- 3 Add $\underline{\mathbb{Z}}$ 20 μ L $\underline{\mathbb{Z}}$ 40 μ L Proteinase K and mix by pipetting up or down







Discard collection tube

- 14 Place column in new 2 ml collection tube
- max rpm,
 00:01:00

 Discard collection tube

- 16 Place column in new 1.5 ml collection tube
- Δ 150 μL Δ 200 μL SEB buffer Qiagen Catalog #19086
- Incubate 00:05:00 © 8 Room temperature
- 19 (max rpm, 00:01:00)
- QC: Qubit Qubit® dsDNA HS Assay Kit Thermo Fisher Scientific Catalog #Q32854 and
 Tape Station Genomic DNA ScreenTape Agilent Technologies Catalog #5067
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