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DNA extraction from whatman filter papers

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Protocol status: Working

We use this protocol and it's working

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Abstract

This protocols is for RNA extraction from Whatman filter paper.

Materials

STEP MATERIALS

 Chelex 100 **Merck MilliporeSigma (Sigma-Aldrich) Catalog #C7901-100G**

 DNase/RNase free distilled water **Thermo Fisher Scientific Catalog #10977023**

Protocol materials

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Lyse RBC


1 Filter paper disc containing blood cut and placed into 1.5 mL EP tubes.


2 Add  1 mL RNase-free water and vortex to mix.



 DNase/RNase free distilled water **Thermo Fisher Scientific Catalog #10977023**

3 Incubate at  25 °C Room temperature for  00:15:00 to lyse RBC.

Precipitate the DNA and separate phases

4 Centrifuge at 20,000 × g for  00:05:00 , discard the supernatant with a micropipettor.

 [go to step #2](#) undefined until the DNA precipitate forms a white or pink gel-like pellet at the bottom of the tube.


5 Resuspend the pellet in  150 µL 10% Chelex-100 solution , vortex the sample briefly for  00:00:30 .

 Chelex 100 **Merck MilliporeSigma (Sigma-Aldrich) Catalog #C7901-100G**

6 Incubate the sample at  100 °C for  00:10:00 .

7 Centrifuge for  00:05:00 at 20,000 × g.



- 8 Carefully transfer the supernatant to a clean 1.5 mL EP tube with a micropipettor. Proceed to downstream applications, or store the DNA at  -20 °C .

Determine the DNA yield

- 9 Measure absorbance at 230nm, 260nm, and 280nm, Calculate the A260/A280 and A230/A260 ratio.