



- Protocol
- Specification

## Prepito DNA Blood250 Kit

DNA purification from up to 250 µl blood

*for general purposes*

### Kit Components

**Magnetic Beads**

**Lysis Buffer 1**

**Binding Buffer 2**

**Wash Buffer 3**

**Wash Buffer 4**

**Wash Buffer 5**

**Wash Buffer 6**

**Elution Buffer 7**

**Protease**

**Deep Well Plates**

**Single Tubes**

**Disposable Tips**

**Completion time:**

Approximately 40 minutes

**Typical yield:**

5 - 10 µg DNA

### Storage Conditions and Safety Information

This kit may be stored at room temperature (15 – 25 °C) and is stable for at least 1 year following delivery. The kit buffers contain irritant substances. Take appropriate laboratory safety measures and wear gloves when handling.

The included protocol is sufficient for most blood samples: fresh, non-coagulated, and frozen. This kit is optimized for DNA purification from human blood samples obtained from healthy individuals.

Using this method 0.5 - 2 % of the eluate is normally a sufficient template for PCR amplification.

**it's chemagic!**

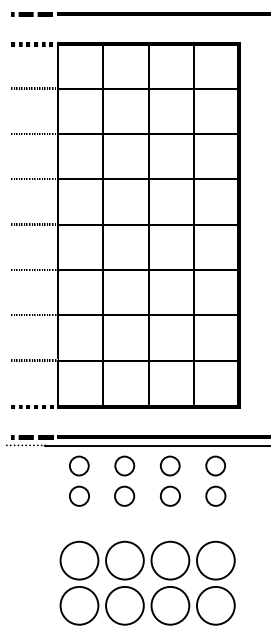
Any further questions?



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## Positioning Procedure

see "Protocol Steps" for detailed information.



- Pos. H
- Pos. G
- Pos. F
- Pos. E
- Pos. D
- Pos. C
- Pos. B
- Pos. A 100 - 250 µl whole blood and **Protease\***
  
- Pos. 4 empty
- Pos. 3 disposable tips
  
- Pos. 2 single tubes with 60 µl **Magnetic Beads**
- Pos. 1 empty single tubes for **Elution Buffer 7**

**!** \* *Protease is required only for sample volumes > 150 µl whole blood*

## Before You Start

1. Dissolve **Protease** in the appropriate volume of distilled water (see protease flask label).
2. Connect all buffer supply containers to the **chemagic Prepito**. Take care that all buffer supply containers contain enough buffer for the selected number of samples (see and follow the instructions in the manual).

**!** *The lyophilized Protease is stable at 15 - 25 °C for 6 months. The reconstituted Protease is stable for 2 months at 2 – 8 °C or at –20 °C.*



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## Protocol Steps

1. Insert the protocol card:” **Prepito DNA Blood250 Kit**” into the card reader slot.
2. Enter your 4-digit access code for authorization.
3. Choose the positions where the samples will be placed. If barcode reading is required follow the instructions on the touch screen panel.
4. Before pressing the start button prepare the blood lysate, place all plastic materials and tubes with **Magnetic Beads** to the appropriate positions.
5. Place one empty single tubes (position1), one tube filled with 60 µl of **Magnetic Beads** (position 2) and one disposable tips (position 3) for each sample to the chosen sample positions.
6. **Preparing the blood lysate**  
Fill in 10 µl of **Protease** in each chosen sample well of the Deep Weel Plate (DWP, riplate SW). Add up to 250 µl of your blood sample to the with **Protease** prefilled wells. For sample volumes less or equal than 200 µl **Protease** must not be added.

**!** *Incubation of the blood samples longer than 5 min without **Lysis Buffer 1** can lead to lower yields and decreased purities of the extracted DNA. Therefore continue immediately with further protocol steps.*

7. Place the DWP containing Blood, **Lysis Buffer 1** and **Protease** on the tracking system in the rear position.
8. Place the Tip & Tube Rack on the tracking system in the front position.
9. Check for accurate fitting of the plate and close the safety latch.
10. Start the program immediately



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## General Remarks

The **Elution Buffer** included in this kit is 10 mM Tris-HCl pH 8.0. TE buffer pH 8.0 can also be used without any protocol adjustments. Water pH 8.0 may also be used, but the yield could be slightly decreased.

**Binding Buffer 2**, **Wash Buffer 3**, **Wash Buffer 4**, **Wash Buffer 5** contain ethanol. To maintain maximum length of storage avoid leaving lids off for a long period of time. If ethanol evaporates the optimal yield can not be guaranteed.

The **Magnetic Bead** suspension should be mixed vigorously before dispensing, otherwise the suspension is not homogenous and the DNA yield could be low.

## UV Measurements

In some cases you may find traces of magnetic beads left in the eluate. Such particles will not interfere with PCR and most downstream applications but may increase the background UV measurements. In such a case, prior to UV analysis, we recommend an additional separation step using a manual separator in order to separate any traces of particles.



Any further questions?