PROTOCOL

For research use only. Not for use in diagnostic procedures.

Prepito DNA Blood600 Kit

DNA purification from up to 600 µl blood
Product no. CMG-2004

Kit Components

Magnetic Beads	**Wash Buffer 6**
Lysis Buffer	**Elution Buffer**
Binding Buffer	**Protease**
Wash Buffer 3	**48-Well-Plates**
Wash Buffer 4	**0.75 µL Reaction Tubes**
Wash Buffer 5	**Disposable Tips**

Completion time: approximately 55 minutes

Typical yield: 12 - 24 µg DNA

Storage Conditions and Safety Information

Expiry dates are stated on the box and on each single component of the kit. Do not use any component of the kit beyond the expiration date. All kit components can be stored at room temperature.

After dissolving, Protease solution has to be stored at 4 °C and can be used for 6 weeks. For long term storage we recommend aliquoting the Protease solution and storing at –20 °C.

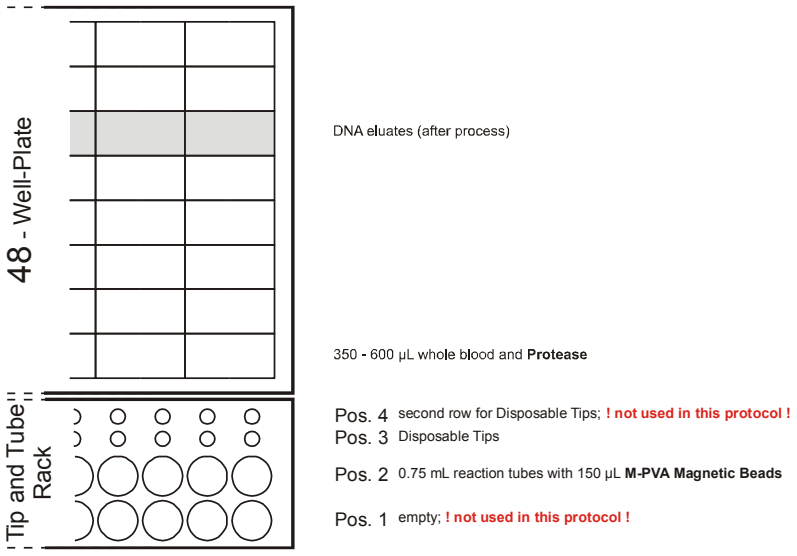
Any further questions?
chemagen Technology technical support: +49 (0) 2401 805-501 | support.chemagen@perkinelmer.com

PerkinElmer®

For research use only. Not for use in diagnostic procedures.

Positioning Procedure

*See "**Protocol Steps**" for detailed information*



Before You Start

- Check all kit components for integrity. In case of damages contact your supplier.
- Connect the tubes according to their numbering to the respective counterparts at the **chemagic 8-Pack**. Remove the lids from the individual buffer bottles in the **chemagic 8-Pack** and pierce the septum with the spike placed at the end of each tube. Place the **chemagic 8-Pack** upside down on the reagent holder and use the manual priming function for a complete filling of the dispensing system.
- Dissolve the lyophilized **Protease** in Aqua dest. (see instruction on the tube).

Any further questions?
chemagen Technology technical support: +49 (0) 2401 805-501 | support.chemagen@perkinelmer.com

For research use only. Not for use in diagnostic procedures.

Protocol Steps (chemagic Prepito serial numbers 1 – 99)

1. Switch the **chemagic Prepito** on and wait until the self test is finished.
2. Press [**change protocol**].
3. Select the **Prepito DNA Blood D600 Kit** protocol by pressing [**Blood 600**].
4. Enter the access code [**1223**] for authorization and confirm by pressing [**enter**].
5. Confirm the selection of the correct protocol by pressing [**enter**].
6. Read the protocol information in the appearing information screen. Confirm by pressing [**continue**].
7. Select the sample positions and confirm by pressing [**continue**].
8. Enter the kit barcode with the barcode scanner and confirm by pressing [**ok**].
9. For the registration of the samples and storage tubes press [**yes**] and follow the instructions on the touch screen panel to enter the according barcodes.
10. Prepare the **chemagic Tip & Tube Rack** with the required materials. Place two 0.75 mL reaction tubes filled with 150 µL **Magnetic Beads** (position 2) and two **Disposable Tips** (position 3) for each sample into the positions according to the sample positions.

! ***Shake the vessel with the Magnetic Beads vigorously until all Magnetic Beads are completely resuspended. An incomplete resuspension of the Magnetic Beads can cause a decreased yield of extracted nucleic acids.***

11. Add 350 - 600 µL blood to each well of the 48-Well-Plate (DWP, riplate SW) defined as sample well (see section above “Positioning of Deep Well Plate and **chemagic Tip & Tube Rack**”).
12. Add 10 µL **Protease** to each sample well prefilled with blood.

! ***Incubation of the blood/Protease mixtures longer than 5 minutes can lead to lower yields and decreased purities of the extracted DNA. Therefore, continue immediately with further protocol steps after adding the blood samples.***

13. An information screen indicates the previously selected sample positions. Ensure that the sample positions in the DWP correspond to the selected positions. Place the DWP on its default position on the tracking system and press [**continue**].

Any further questions?
chemagen Technology technical support: +49 (0) 2401 805-501 | support.chemagen@perkinelmer.com

PerkinElmer®

14. Place the **chemagic Tip & Tube Rack** on its default position on the tracking system. Check for accurate fit of the DWP and **chemagic Tip & Tube Rack** and lock both by closing the safety latch.
15. Close the front door and immediately start the automated isolation process by pressing [start] immediately.

Any further questions?

chemagen Technology technical support: +49 (0) 2401 805-501 | support.chemagen@perkinelmer.com

For research use only. Not for use in diagnostic procedures.

Protocol Steps (chemagic Prepito serial numbers 100 and later)

1. Switch on the **chemagic Prepito** and wait for the self test to finish.
2. Press [**Change Protocol**].
3. Press [**Blood**] in the Select Protocol Group window.
4. Select the **Prepito DNA Blood D600 Kit** protocol by pressing [**Blood 600**] and confirm by pressing [**OK**].
5. Confirm the protocol selection in the Select Protocol Group window by pressing [**OK**].
6. Enter the 4 digit access code [**1223**] for authorization and confirm by pressing [**Enter**].
7. Press [**Start Process**].
8. Read the protocol information in the appearing information screen and confirm by pressing [**Continue**].
9. Select the sample positions and confirm by pressing [**OK**].
10. Enter the kit barcode with the barcode scanner and confirm by pressing [**OK**].
11. For the registration of the samples and the storage tubes press [**Yes**] and follow the instructions on the touch screen panel to enter the according barcodes.
12. Prepare the **chemagic Tip & Tube Rack** with the required materials. Place two 0.75 mL reaction tubes filled with 150 µL **Magnetic Beads** (position 2) and two **Disposable Tips** (position 3) for each sample into the positions according to the sample positions.

! ***Shake the vessel with the Magnetic Beads vigorously until all Magnetic Beads are completely resuspended. An incomplete resuspension of the Magnetic Beads can cause a decreased yield of extracted nucleic acids.***

16. Add 350 - 600 µL blood to each well of the 48-Well-Plate (DWP, riplate SW) defined as sample well (see section above “Positioning of Deep Well Plate and **chemagic Tip & Tube Rack**”).
13. Add 10 µL **Protease** to each sample well prefilled with blood.

! ***Incubation of the blood/Protease mixtures longer than 5 minutes can lead to lower yields and decreased purities of the extracted DNA. Therefore, continue immediately with further protocol steps after adding the blood samples.***

Any further questions?
chemagen Technology technical support: +49 (0) 2401 805-501 | support.chemagen@perkinelmer.com

PerkinElmer®

14. An information screen indicates the previously selected sample positions. Ensure that the sample positions in the DWP correspond to the selected positions. Place the DWP on its default position on the tracking system and press [**Continue**].
15. Place the **chemagic Tip & Tube Rack** on its default position on the tracking system. Check for accurate fit of the DWP and **chemagic Tip & Tube Rack** and lock both by closing the safety latch.
16. Close the front door and start the automated isolation process by pressing [**Start**] immediately.

General Remarks

The **Elution Buffer** included in this kit is 10 mM Tris-HCl pH 8.0.

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 (e.g. **chemagic Stand 2x12**, art. No. CMG-300) in order to separate any traces of particles.

Any further questions?
chemagen Technology technical support: +49 (0) 2401 805-501 | support.chemagen@perkinelmer.com