September 2022

Quick-Start Protocol

EZ1&2™ DNA Blood Kit

For use with EZ2® Connect instruments

To use the EZ1&2 DNA Blood 200 µl Kit and EZ1&2 DNA Blood 350 µl Kit with the EZ1® instrument, refer to the corresponding handbook (**www.qiagen.com/HB-0197**) and quick-start protocol (**www.qiagen.com/HB-0782**).

The EZ1&2 DNA Blood Kits (cat. nos. 951034 and 951054) can be stored at room temperature (15–25°C) until the indicated expiration date. Do not freeze the reagent cartridges.

Further information

- *EZ1&2 DNA Blood Handbook* for use with EZ2 Connect instruments: **www.qiagen.com/HB-2965**
- Safety Data Sheets: **www.qiagen.com/safety**
- Technical assistance: **support.qiagen.com**

Notes before starting

- The buffer in well 1 of the reagent cartridge may form a precipitate upon storage. If necessary, redissolve by warming at 37°C and then place at room temperature (15–25°C).

- Mix the blood samples thoroughly before loading them onto the EZ2 Connect instrument to ensure homogeneity of the sample. If using frozen blood samples, thaw the blood samples and equilibrate to room temperature before mixing.

Table 1. Amounts of starting material for EZ1&2 DNA Blood procedures

Sample type	Amount of starting material (µl)	Elution volume (µl)
Blood	200 or 350	50, 100, or 200
Buffy coat*		
Buffy coat, enriched >9x†	50–75	200
Buffy coat, enriched ≤9x‡	100–50	200
Buffy coat with low leukocyte concentration	200–300	200

* For each buffy coat protocol, the maximum number of cells to use as starting material is 5 x 10^6 cells.
† For example, 1 ml leukocyte-containing fraction harvested from 10 ml centrifuged whole blood = 10x enrichment.
‡ We recommend this for preparation of buffy coat.

Procedure

1. Switch on the EZ2 Connect instrument.
2. Tap "DNA" on the Applications panel and then select the "DNA Blood 200 µl Kit" or the "DNA Blood 350 µl Kit" and press **Next**.
3. Choose the "DNA Blood" protocol and press **Next**.
4. Choose sample and elution volume. Select if wash step with ethanol should be performed and press **Next**.
5. Select positions on the work deck according to the number of samples to be processed and press **Next**.
6. Enter sample IDs or press **Generate missing sample IDs**. Then press **Next**.
7. Gently invert reagent cartridges 4 times to mix the magnetic particles. Tap the cartridges to deposit the reagents at the bottom of their wells. Check that the magnetic particles are completely resuspended.

8. Load the EZ1&2 Blood reagent cartridges into the positions of the EZ2 Connect Cartridge Rack that were selected in step 5.
9. Open the instrument hood. Load the EZ2 Connect Cartridge Rack into the EZ2 Connect instrument.

   9a. Remove caps of all tubes and prepare the EZ2 Connect Tip Rack as follows:
   - Position A: 2.0 ml sample tube
   - Position B: 2.0 ml tube with 1800 µl 80% ethanol (optional, see step 4)
   - Position C: Tip holder with Filter Tips
   - Position D: 1.5 ml empty elution tube

   9b. Press **Next**.
10. Place the EZ2 Connect Tip Rack into the EZ2 Connect instrument and start the run according to the instructions on the instrument display.
11. The display will show "Protocol finished" when the run is completed. Select **Finish**.
12. Open the instrument hood. Remove the elution tube containing purified nucleic acid from position D of the EZ2 Connect Tip Rack. Discard the used cartridge including the liquid waste.
13. Perform regular maintenance after each run. Press **Finish** to return to the home screen.

Document Revision History

Date	Changes
08/2022	Initial release

Scan QR code for handbook.

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