Maxwell® RSC Blood DNA Kit

Instructions for Use of Products AS1400 and ASB1400.

Promega

Quick Protocol

Preparation of Whole Blood Samples for DNA Purification

Materials to Be Supplied by the User

- optional, rotating tube mixer for liquid blood samples
- benchtop vortex mixer
- pipettors and pipette tips for sample transfer into prefilled reagent cartridges
- 1.5–2.0ml tubes for incubation of samples (e.g., ClickFit Microtube, 1.5ml [Cat.# V4741])
- heating block set at 56°C

The total yield of genomic DNA from whole blood samples depends on the sample volume and number of white blood cells/ml.

Note: Fresh or frozen whole blood samples collected in EDTA, ACD or heparin tubes can be used. EDTA blood collection tubes are preferred if the purified DNA will be used in downstream amplification assays.

1. Mix all blood samples for at least 5 minutes at room temperature.
2. Prepare and label incubation tubes compatible with heating block.
3. Add 30µl of Proteinase K (PK) Solution to each incubation tube.
4. Add liquid blood (up to 300µl) to each incubation tube.
5. Add 300µl of Lysis Buffer to each incubation tube.
6. Vortex each tube for 10 seconds.
7. Incubate each tube in the heating block (set to 56°C) for 20 minutes. During this incubation, prepare cartridges as described below.
8. Transfer each blood lysate sample from the incubation tube to well #1 of each cartridge. (Well #1 is the well closest to the printed side and furthest from the elution tube.)

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Quick Protocol

Maxwell® RSC Automated DNA Purification

Cartridge Preparation

1. Place the cartridge to be used in the Deck Tray with the printed side facing away from the elution tube.
2. Press down on the cartridge to snap it into position. Carefully peel back the seal so that all plastic comes off the top of the cartridge. Ensure that all sealing tape and any residual adhesive are removed before placing the cartridge in the instrument.

   Note: If you are processing fewer than 16 samples, center the cartridges on the Deck Tray.
3. Place a plunger in well #8 of each cartridge. Well #8 is the well closest to the elution tube.
4. Place an empty elution tube into the elution tube position for each cartridge. Add 50µl of Elution Buffer to the bottom of each elution tube.

   Notes:
   1. If Elution Buffer is on the side of the tube, the elution may be suboptimal.
   2. Use only the Elution Tubes (0.5ml) provided in the kit; other tubes may be incompatible with the Maxwell® RSC Instrument.

Instrument Run on the Maxwell® RSC Instrument

1. Refer to the *Maxwell® RSC Instrument Operating Manual* #TM411 for detailed information.
2. Follow the instrument run instructions in the *Maxwell® RSC Blood DNA Kit Technical Manual* #TM419.

Additional protocol information is in Technical Manual #TM419, available online at: **www.promega.com**

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