



Protocol for DNA purification from dried blood spots

This protocol is for use of a QuickPick™ kit together with a QuicPick™ magnetic tool.

Note: The protocol has been established using S&S 903 filter paper (Schleicher & Schuell) and single blood spot punches of ~3.2 mm in diameter (containing approx 3 µl whole blood). Yields can be increased by increasing the number of punches.

1. Punch an approximately 3.2 mm diameter sample from a dried blood spot and transfer the piece into a tube. Add 50 µl of distilled water. Make sure that the paper is fully immersed.
2. Cool for 30 seconds at +4 °C followed by heating for 3 minutes at +95 °C. Repeat the cycle 8 times.
3. Transfer the solution into a new tube and add Binding Buffer and Magnetic Particles.
4. Follow the protocol as described in QuickPick™ SML gDNA kit insert. Incubation time of 5 minutes is recommended for the binding step. During the binding step pipette the rest of the reagents into tubes according to the Table 1.
5. Elute the DNA for 5 minutes or until magnetic particles are uniformly dispersed.
6. The volume of Elution buffer can be decreased or increased depending on the desired DNA concentration for the downstream application.

Table 1. Reagent volumes for genomic DNA purifications

Reagent	Reagent volume per preparation
Binding Buffer	60 µl
Magnetic Particles	4 µl
Wash Buffer 1	2 x 250 µl
Wash Buffer 2	250 µl
Elution Buffer	20 µl