



Protocol for DNA purification from buccal cells

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

Sample collection:

To collect a sample, scrape a swab against the inside of each cheek 6 times. Allow the swab to air-dry for at least 2 h after collection. Ensure the person providing the sample has not consumed any food or drink for 30 min prior to sample collection.

DNA purification:

1. Pipette 200 µl of Lysis Buffer and 5 µl of Proteinase K into a 2 ml tube and mix.
Note: The minimum volume for lysis buffer is 200 µl.
2. Carefully cut approximately 2.5 cm of the end part of the swab and place it into the bottom of the tube. Vortex the tube for 10 seconds. Centrifuge the tube briefly (at 10,000 x g for 30 s).
3. Incubate at 56°C for 15 min. Vortex the tube 1–2 times during the incubation, or place in a thermomixer.
4. During the lysis step pipette the rest of the reagents into tubes according to the Table 1.
5. Remove the swab from the tube using forceps. Press the swab against the inside of the tube to obtain maximum sample volume.
6. Follow the protocol starting from combining the lysed sample, Binding Buffer and Magnetic Particles as described in QuickPick™ SML gDNA kit insert. Incubation time of 10 minutes is recommended for the binding step.
7. Elute the DNA for 10 minutes or until magnetic particles are uniformly dispersed. 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 purification

Reagent	Reagent volume per preparation
Sample amount	6 times / each cheek
Lysis Buffer	200 µl
Proteinase K	5 µl
Binding Buffer	125 µl
Magnetic Particles	4 µl
Wash Buffer 1	2 x 250 µl
Wash Buffer 2	250 µl
Elution Buffer	10 - 50 µl