



Protocol for DNA purification from chicken feathers

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

1. Cut a 0.5 – 1 cm piece from the feather (base of the feather) as a sample. From very young chicks whole feathers can be used.
2. Add DTT to the Lysis Buffer to a final concentration of 1 %.
3. Place the feather samples into tube, add Proteinase K and modified Lysis Buffer into the same tube according to the table 1. Mix the tube properly by inverting the tube and pipetting up and down several times.
4. Pulse-vortex the tube for 15 seconds and incubate for 30 minutes at +56°C.
5. During the lysis step pipette the rest of the reagents into tubes according to the Table 1.
6. Follow the protocol starting from combining the lysed sample, Binding Buffer and Magnetic Particles as described in QuickPick™ SML gDNA kit insert.
7. Elute the DNA for 2 - 10 minutes or until magnetic particles are uniformly dispersed.
8. 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		
	1 – 2 feathers	3 - 5 feathers	6 - 10 feathers
Sample amount			
Lysis Buffer (containing DTT)	25 µl	50 µl	100 µl
Proteinase K	2.5 µl	5 µl	10 µl
Binding Buffer	62.5 µl	125 µl	250 µl
Magnetic Particles	2 µl	4 µl	8 µl
Wash Buffer 1	2 x 125 µl	2 x 250 µl	2 x 500 µl
Wash Buffer 2	125 µl	250 µl	500 µl
Elution Buffer	5 - 25 µl	10 - 50 µl	25 - 100 µl