

Protocol for genomic DNA purification from urine with PickPen®

Note the DNA is purified from detached epithelial cells, so the optimal sample volume is dependent on the amount of cells expected in the urine sample.

1. Centrifuge the sample for 30 minutes at 3,500 - 4,000 rpm.
2. Remove the supernatant gently and resuspend the cell pellet in Lysis Buffer according to the table 1. Mix the tube properly by pipetting up and down.
3. Add Proteinase K 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 10 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. 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			
	< 2 ml	2 – 5 ml	5 - 8 ml	8 -10 ml
Lysis Buffer	25 µl	50 µl	100 µl	200 µl
Proteinase K	2.5 µl	5 µl	10 µl	20 µl
Binding Buffer	62.5 µl	125 µl	250 µl	500 µl
Magnetic Particles	2 µl	4 µl	8 µl	16 µl
Wash Buffer 1	2 x 125 µl	2 x 250 µl	2 x 500 µl	2 x 750 µl
Wash Buffer 2	5 - 125 µl	10 - 250 µl	25 - 500 µl	750 µl
Elution Buffer	25 µl	50 µl	100 µl	50 - 200 µl

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