Mouse Tail DNA Extraction for Genotyping

(Updated by Guo-Wei Zuo, 09/26/2009)

1. Label 1.5ml tubes with appropriate animal numbers.

2. Cut a small piece (approx. 1 mm^3) of mouse tail, using a scalpel. Samples can be stored at -70°C if needed.

3. Add 100ul Proteinase K buffer, vortex briefly, and incubate overnight at 50°C.

Prot K digestion buffer:
10mM Tris pH 8
100mM NaCl
10mM EDTA
0.1mg/ml Prot K
0.5% SDS

4. Add 200ul ddH_2O, Cfg for 1min at top speed to bring down moisture on sides of tubes.

5. Pour supernatant to a new tube, add 250ul PC-8 (phenol:chloroform), vortex, cfg for 2min at top speed.

6. Transfer the aqueous phase to a clean/labelled 1.5ml tube.

7. Add 700ul cold ethanol and invert to mix. (DNA ppt may not be visible.)

8. Cfg in microfuge for 5min at RT.

9. Aspirate supernatant; add 500ul of 70% ethanol, vortex well, and spin down for 1 min.

10. Aspirate supernatant; Spin down for 10 sec and aspirate the residual liquid completely. Pellets may not be clear.

11. Add 200ul ddH_2O to each pellet and vortex briefly.

12. Store samples at -20°C.