Mouse Typing from ears/tails

Tail/Ear lysis

1. Multiply number of ears or tails x 200 ul to determine volume of Lysis Buffer needed. Pour lysis buffer into a 15 ml concial tube.
2. Multiply lysis buffer volume by 300 ug/ml proteinase K per ml. Warm up Proteinase K in your hand. Weigh out into an eppendorf tube. Add Proteinase K to Lysis Buffer.
3. Add 200 ul Lysis Buffer/Prot K to each sample. Make sure the ear or tail is in the solution and not in the cap.
4. Incubate 55^{o}C, 2-3 hours (or overnight). Vortex 5-10 seconds at top speed. If anything other than hair is left after vortexing, incubate another hour.

DNA Recovery

1. Incubate samples 5 minutes, 95^{o}C to inactivate Proteinase K. Place an eppendorf rack in freezer to cool it. Transfer samples to cooled rack for ~5 minutes.
2. Add 200 ul of cold isopropanol to each sample. Mix samples well by inverting to precipitate DNA.
3. Spin 13,000g, 10 minutes, 4^{o}C.
4. Remove supernatant with P200. Close caps. Spin again 13,000 rpm, 30 seconds. Remove supernatant. With P20.
5. Add 100-200 ul TE to each tube. Incubate 37^{o}C, 30 minutes-overnight. Vortex to mix. Spin 1 min., 13,000 rpm to spin down particulates.

Lysis Buffer

100 mM Tris
200 mM NaCl
5 mM EDTA
0.2% SDS
pH 8