**Mouse Tail/Toe/Ear Clipping DNA Prep Protocol (Alkaline buffer)**

Zhaoyang Liu, August 2018

1. Add 75 µl of Alkaline Lysis Buffer (see below, make sure it is not expired) to each Eppendorf tube with a small clipping from either tails, toes, or ears. Make sure the tissue is submerged in the buffer.
2. Incubate at 95°C for 20min-1h (on heat board, or transfer to PCR tube and put on PCR machine).
3. Add 75ul-100ul of neutralizing buffer (see below). Mix well.
4. (Optional: Spin the tubes for 1 min at ~13,000 rpm to precipice the residual tissue.)
5. Mix well and use 1-2 µl of DNA for genotyping PCR reaction.
6. Store the rest of the DNA at -20°C (good up to 3 months).

**Alkaline-Lysis Buffer (pH 12)**

 For 10ml add:

25mM NaOH 25ul of 10M NaOH

0.2mM EDTA 4ul of 0.5M EDTA (pH 8)

 10ml of ddH2O

**Good for 1 months. Make a new tube once expired.**

**Neutralizing Buffer (pH 4.3)**

 For 500ml add:

80mM Tris-HCl 6.3g TRIS-HCl (sigma 73253) in 500ml ddH2O