

DNA Extraction from Tails
(same protocol good for extracting DNA from any source)

- 1) Cut tail (about 1 cm) and place in eppendorf tube on dry ice
- 2) Add 700 μ l of tail digestion buffer (see below)
- 3) Incubate overnight at 50-55C (if necessary, incubation may be as short as a few hours)
- 4) Vortex the tube and add 700 μ l of a 25:24:1 mixture of phenol:chloroform:isoamyl alcohol (PCI) to extract. Mix well and spin 5 min in a microcentrifuge on highest speed.
- 5) Remove aqueous upper phase to new tube and extract once more as above.
- 6) Remove aqueous upper phase to new tube and extract with a 24:1 mixture of chloroform:isoamyl alcohol.
- 7) Transfer 500 μ l of the aqueous phase to a fresh tube, add 50 μ l of 3M NaOAc, pH 5.2
- 8) Precipitate by adding 330 μ l of isopropanol, mix well.
- 9) Microcentrifuge for 10 min at highest speed
- 10) Wash pellet with 500 μ l of 70% ETOH, respin.
- 11) Aspirate remaining liquid and allow samples to air dry under a heat source
- 12) Resuspend pellets in 50 μ l of TE
- 13) Store at -20C

TAIL DIGESTION BUFFER

- 6 ml of 0.5 M EDTA
- 1.5 ml of 1M TRIS, pH 8.0
- 1.5 ml of 10% SDS
- 21 ml of QH₂O
- 30 mg Proteinase K (FISHER, BP1700-100)