Phenol/Chloroform/Isoamyl DNA isolation Protocol

Digest mouse tail to obtain genomic DNA

Add 250 µl of tail digestion buffer, incubate overnight at 45° or 55° C.
Add 250 µl phenol/chloroform/isoamyl alcohol (25:24:1), shake 2 min, do not vortex.
(Note: Use Phenol of pH 6.6 or greater!!!)
Spin 10’ @ 13,000 rpm
Transfer 200 µl aqueous phase to 1 ml, 100% ETOH to precipitate DNA.
Spin 1-2’ @ 13,000 rpm to pellet.
Decant 100% ETOH into sink.
Dry pellet (should still look white) 10 min on bench top.
Add 100 µl TE, to resuspend (If desired, dissolve in 37° C water bath for 10 min.)
Store at 4° C until ready for use.

Tail Digestion Buffer (100 ml)
1 ml, 1M TRIS, pH 7.8 (final 10 mM)
1 ml, 500 mM EDTA (final 5 mM)
10 ml, 10% SDS (final 1%)
1 ml, 20 mg/ml Proteinase K  (final 200 ug/ml)
20 ml, 1.5 M NaOAc (final 0.3 M)
67 ml ddH₂O autoclaved