Preparation of Tail DNA for PCR Using Non-Ionic Detergents

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(Adapted from Jackson Laboratory's Protocol)

1. Cut the last 2 mm of the mouse tail and place it in a 1.5 ml microfuge tube.

2. Add 200 μl of PBND buffer containing 100 μg/ml Proteinase K.

3. Incubate in 56°C water bath with occasional vortexing until the tissue is lysed (1-3 hours). If necessary, the incubation can be allowed to proceed overnight.

4. Heat samples at 95°C for 5 min in heat block to inactivate the Proteinase K. Make sure to perforate the lid of the tubes with a small needle to avoid exploding tubes.

5. Use 0.5 μl of sample for a 20 μl PCR reaction.

PBND (PCR buffer with non-ionic detergents) Preparation
(50 mM KCl, 10 mM Tris-HCl, 2.5 mM $MgCl_2$, 0.1 mg/ml Gelatin, 0.45% v/v IGEPAL and 0.45% v/v Tween 20).

To 450 ml of ddH_2O add:

5.0 ml	1M Tris-HCl Stock, pH 8.3
1.87 g	KCl
0.255 g	$MgCl_2.6H_2O$
2.25 ml	IGEPAL
2.25 ml	Tween 20
0.05 g	Gelatin

Bring volume to 500 ml with ddH_2O and autoclave.
Prepare 10 ml aliquots and freeze at -20°C.
Note: Gelatin will dissolve only after autoclaving.