

Basic Genotyping Protocol:

- (1) Isolate DNA from 1cm tail clip from mice during weaning. Follow DNA isolated from tissue kit instructions.
- (2) (Optional) Test DNA concentration using nanodrop or H-stain assay.
- (3) Set up and perform PCR (see below).
- (4) Store samples at 4C until you are able to run samples on DNA gel.

Ingredient	Per 1 Rxns	Per 21 Rxns
dH2O	13	273
Fermentas buffer	2	42
dNTPs (10mM)	2	42
FOR (5') (10 μ M)	1	21
REV (3') (10 μ M)	1	21
Taq Fermentas	0.1	2.1
Total	19.1	401.1

Add 18.5 μ l of reaction mixture to 1 μ l of isolated DNA sample.

Ribotag Reaction:

95 for 2 min

95 for 20 sec

57 for 20 sec

72 for 30 sec

72 for 5 min

30 cycles

Band size:

290bp = Ribotag

260bp = WT

program on PCR machine: Ribotag 56

CRE Reaction:

95 for 2 min

95 for 10 sec

63 for 10 sec

72 for 40 sec

72 for 5 min

25 cycles

program on PCR machine: CRE

Band size:

Run samples on DNA gel.

Ingredient	Volume
1X TBE	15ml
40% Acry Bis	5ml
10% APS	150 μ l
Temed	30 μ l
<i>Will make 2 gels 1.5mm thick.</i>	

- (1) Load 2-10 μ l of sample per lane depending upon robustness of reaction.
- (2) Run samples in 0.5-1X TBE, 140mV, 30-45 minutes.
- (3) Utilize 100bp or 1kbp DNA ladder. Load 3 μ l of ladder per lane.