

PROTOCOL FOR TetO-Cre MOUSE GENOTYPING

Procedure

Genotyping of offspring from tetO-Cre breeding colony is based on PCR.

PCR primers

5' forward primer (Cre2) 5' **ggt tag cac cgc agg tgt ag** 3'
3' reverse primer (JL23) 5' **cac atc tag act aat cgc cat ctt cca gca g** 3'

PCR profile – TEDX3

94 °C, 5 min

94 °C, 45 s 35 cycles
56 °C, 45 s
72 °C, 1 min

72 °C, 10 min

4 °C, ∞

PCR mix

| | |
|-------------------------------------|----------------|
| 10 x PCR Gold buffer (Perkin Elmer) | 3.0 µl |
| MgCl ₂ (25 mM) | 2.5 µl |
| dNTPs (10 mM) | 0.5 µl |
| JL23 (20 µM) | 0.5 µl |
| Cre2 (20 µM) | 0.5 µl |
| AmpliTaq Gold (5 U/µl) | 0.2 µl |
| DNA template (~ 0.5 µg tail DNA) | 2.0 µl |
| ddH ₂ O | <u>20.8 µl</u> |
| | 30 µl |

Post-PCR analysis

Load 10 µl of the PCR reaction on a 1 % agarose gel.
Expected results; one band – 430 bp.