

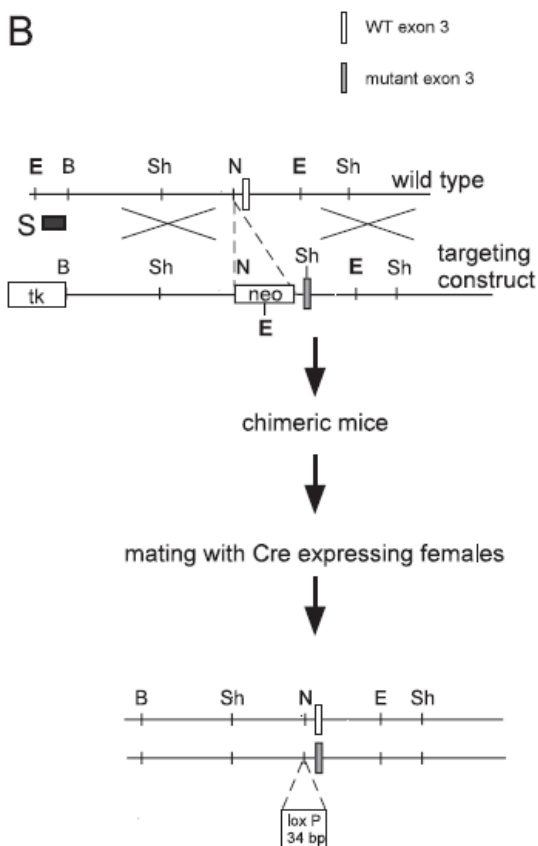
Genotyping Protocol: **MMRRC 34289**

Assay Type: PCR- can distinguish heterozygous animals from homozygous animals

DNA Extraction: DNA from tail snips was extracted using Qiagen's DNeasy Blood and Tissue kit (Cat# 69506). Kit directions for animal tissues were performed with a few minor modifications as follows: repeat AW1 and AW2 wash steps one time, elute in 200µl of AE buffer once.

Strain Description: This strain carries a knocked-in mutation within Exon 3 of the of the estrogen receptor 1 (alpha) gene (*Esr1*) on Chromosome 10. The knock-in of the E207A/G208A mutation results in substitution of glutamate (207) and glycine (208) with alanine at both positions. Details can be found in Jakacka et al (2002) Mol Endocrinol 16:2188-2201.

Please note: this mutation is being maintained on a C57BL/6 genetic background. The mutation is also available on the 129 genetic background (MMRRC 34288).



Sequence Comparison (Codons 207 and 208 highlighted in yellow)

WT Sequence:

GTCTAATTCTGACAATCGACGCCAGAATGGCCGAGAGAGACTGTCCAGCAGTAACGAGAAAGGAAACATGATCATGGAGTCTGCCAAGGAGACT
 CGCTACTGTGCCGTGTGCAATGACTATGCCTCTGGCTACCATTATGGGGTCTGGTCTCGCAAGGC

Mutant Sequence:

GTCTAATTCTGACAATCGACGCCAGAATGGCCGAGAGAGACTGTCCAGCAGTAACGAGAAAGGAAACATGATCATGGAGTCTGCCAAGGAGACT
 CGCTACTGTGCCGTGTGCAATGACTATGCCTCTGGCTACCATTATGGGGTCTGGTCTCGCTGCATGCAAGGC

