Mouse Information

- **Common Name:** PPARgamma
- **MGI Official Name:** Pparg \(^{tm1.1Mgn}\)
- **Description:** These mice carry a conditional allele for PPARgamma that can be used in combination with various cre-expressing transgenes.
- **Categories:** Cre-lox floxed alleles

Genetic Alterations

1) **Targeted Mutagenesis**

- **Type of Allele:** Conditional Null
- **Targeted Gene:** Peroxisome proliferator-activated receptor gamma (Pparg - NCBI GeneID:19016)
- **Targeted Allele:** targeted mutation \(^{1.1Mgn}\) (Pparg \(^{tm1.1Mgn}\) - MGI:2385456)

- **Description of Targeting Vector:** A gene targeting strategy that utilizes Cre/loxP was used to generate mice that contain loxP sites flanking exon 2 of the Pparg gene, thus generating a conditional allele. Genotype by DNA PCR using primers 5'-GCT CCT GAG TGC TAA TAT TAA AG-3' and 5'-CCA TGG ACT AAT GCT GTA ATA TTA-3' primers. These primers amplify a 572 bp loxed allele and a 464 bp wild type allele. Homozygous animals are viable and do not exhibit any obvious mutant phenotype. Heterozygous mice are viable and do not exhibit any obvious mutant phenotype.

Targeting Vector Genbank File

- mPPARG.KO.gb

Citations

- PubMedID: 11857800

Strain Information

- **Strain Type:** Congenic Strain
- **Chimera/Founder Genetic Background:** 129S6/SvEvTac
- **Current Genetic Background:** C57BL/6J (date recorded: Not provided)
- **Strain Description:** Mice carrying the Pparg \(^{tm}\) allele were backcrossed to C57BL/6J for 12 generations.

Associated Images

- Image 1

Description:

FIG 1. Conditional and null PPARg alleles generated by gene targeting and Cre-mediated recombination. (a) Top, wild-type PPARg allele. Exons are indicated as solid rectangles. The location of the DNA fragment used for Southern blot hybridization is...
shown. Middle, diagram of the gene targeting vector. The vector contains a pgk-neo cassette, a pgk-HSVtk cassette, and three tandem loxP sequences (triangles). Two of the loxP sites flank neo, and the third is located between exons 1 and 2 in the PPAR gene. The PPARglox+neo allele was created by homologous recombination in ES cells. Bottom, the PPARglox and PPARgdel alleles were derived from PPARglox+neo mice by partial or total Cre-mediated recombination via microinjection of a Cre-expression plasmid into single-cell PPARglox+neo embryos.

Reference: 11857800

Repositories

MMRRC

Stock #: 012035-MUH
Availability Notes: Not provided

Magnuson Lab

Stock #: VUMC - CG
Availability Notes: Not provided

Contact Information

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Associated Publications
No publications associated

Comments
There are no comments for this entry.