Mouse Information

Common Name: Pdx1(Cre-ER)
MGI Official Name: Pdx1(Cre-ER)
Description: In this mouse line, the first exon of the transcription factor Pdx1 was replaced with the coding sequence for a Cre-ER fusion protein using RMCE in the Pdx1[LCA] allele. Pdx1-promoter driven Cre-ER expressing mice enable tamoxifen-inducible Cre-LoxP manipulation of pancreatic lineage cells.

Categories: Cre-lox floxed alleles

Genetic Alterations

1) RMCE Targeted Mutagenesis

Type of Allele: Cassette Acceptor
Targeted Gene: pancreatic and duodenal homeobox 1 (Pdx1 - NCBI GeneID:18609)
Targeted Allele: targeted mutation 1 (Pdx1tm1(LCA) - MGI:102851)
Description of Targeting Vector: An 8.62 kb region of this gene has been replaced by tandemly oriented Lox66 and Lox2272 sites flanking positive (puromycin) and negative (HSV-TK) selectable markers.

Targeting Vector Genbank File: ppdx1tv.gb

Recombinase-Mediated Cassette Exchange Stage

Type of Allele: Gene Replacement
Exchanged Cassette Gene: pancreatic and duodenal homeobox 1 (Pdx1[cre-ER] - NCBI GeneID:18609)
Exchanged Cassette Allele Name: Pdx1/cre-ER
Description of Exchange Vector: The pPdx1.Cre.ERT2 vector was made on a backbone of a basal exchange vector which contains a 8.610 kb sequence from the Pdx1 locus, Lox71/Lox2272 sites, and a flrted (flanked by FRT) Pgk-Hygro cassette that is used for positive selection of ES cells after RMCE. The Cre-ERT2 sequence was cut from the pCre-ERT2 vector (Trish Labosky, Pierre Chambon) and put into the first exon of Pdx1 (immediately following the ATG site).

Exchange Vector Genbank File: pbs.pdx1.cre.ert2.gb

Citations: Not Available

Strain Information

Strain Type: Mixed
Chimera/Founder Genetic Background: 129S6/SvEvTac
Current Genetic Background: C57BL/6 (date recorded: 04/27/2011)
Strain Description: Not provided

Resource Tags

mESC Core, mouse, mouse strain, Pdx1(Cre-ER), RMCE

Access Status

This resource is publicly viewable.

Request this Resource

Primary contributor: Wright Lab
Co-contributed by: BCBC Mouse / ES Cell Core, Magnuson Lab

Resource History & Actions

Approved on Dec 22, 2011
Last modified on Apr 17, 2015

Related resources

BCBC
No matching resources

Other Consortia
No matching resources

Data courtesy of dkCOIN. Only public resources are displayed.
Repositories

Magnuson Lab

Stock #: OGBSID: 0096
Availability Notes: Sperm cryo

Wright Lab

Stock #: Not provided
Availability Notes: Not provided

Contact Information

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Associated Publications
No publications associated

Comments
There are no comments for this entry.