

My Account

Login
Create Account

Resources

View All (813)
Adenoviruses (137)
Antibodies (175)
Bioimages (67)
Genomics Studies (145)
mESC Lines (68)
Mouse Strains (120)
Miscellaneous (46)
Protocols (55)
Research Data (4)
Resource Tags (389)
Visualization (9)

Research & Cores

Core Facilities (5)
Research Highlights (5)
Research Networks
Research Objectives

Information

About the BCBC
BCBC Events
Branding & Logos
Career Opportunities
Health
NIH hESC Registry
Policies & Guidelines
Member Publications
Research Programs
Research Investigators
Member Directory
Tutorials

Pdx1^{Cre.ER} - ES Cell Line RES4144**ESC Line Information**

Cell Line Name:	Pdx1 ^{Cre.ER}
Parental Cell Line:	TL-1
Background Strain:	129
Culturing Protocol:	standard_mesc_culturemm.pdf
Description:	In this cell 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.

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 (Pdx1 ^{tm1(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Description of Targeting Vector	An 8.62 kb region of this gene has been replaced by tandemly oriented Lox66 and Lox2272 sites flanking positive (puromycin) and negative (HSV-TK) selectable markers.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 flrtd (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

Associated Images**Image 1**


Description:
Not provided

Reference:
Not provided

Access Status

 This resource is publicly viewable.

Request this Resource


 Request from a repository

Primary contributor: [Wright Lab](#)
Co-contributed by:
• [BCBC Mouse / ES Cell Core](#)

Resource Tags


embryonic, es, esc, mESC Core, Pdx1^{Cre.ER}, stem, TL-1

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 Read more about tags

Resource History & Actions

Approved on Dec 22, 2011
Last modified on Dec 16, 2011

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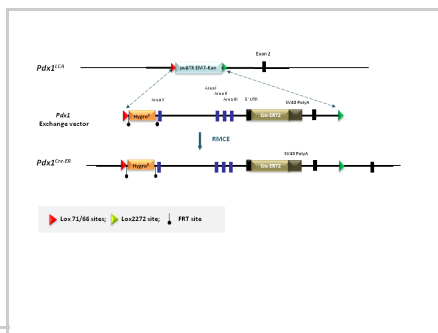
Related resources**BCBC**

No matching resources

Other Consortia

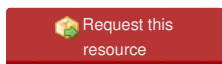
No matching resources

Data courtesy of [dkCOIN](#). Only public resources are displayed.



Repositories

Magnuson Lab



Stock #: *Not provided*
Availability Notes: *Not provided*

Contact Information

Preferred Contact

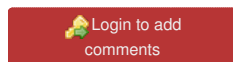
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Associated Publications

No publications associated

Comments

There are no comments for this entry.



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