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**Pdx1<sup>rTTA</sup> - ES Cell Line RES4157****ESC Line Information**

Cell Line Name:	Pdx1 <sup>rTTA</sup>
Parental Cell Line:	TL-1
Background Strain:	129
Culturing Protocol:	<a href="#">Std_mESC_Culture.doc</a>
Description:	In this cell line, the first exon of Pdx1 was replaced with the coding sequence for rTTA protein, using RMCE in the Pdx1 <sup>LCA</sup> allele. Generation of Pdx1-promoter driven rTTA expressing mice will enable tetracycline-inducible manipulation of pancreatic lineage cells.

**Genetic Alterations****1) RMCE Targeted Mutagenesis**

Type of Allele	Cassette Acceptor
Targeted Gene	pancreatic and duodenal homeobox 1 (Pdx1 - <a href="#">NCBI GeneID:18609</a> )
Targeted Allele	targeted mutation 1 (Pdx1 <sup>tm1(LCA)</sup> - <a href="#">MGI:102851</a> )
Description of Targeting Vector	An 8.62 kb region of this gene has been replaced by tandemly oriented Lox66 and Lox2272 sites flanking positive (puromycin) and negative (HSV-TK) selectable markers.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	<a href="#">ppdx1tv.gb</a>
<b>Recombinase-Mediated Cassette Exchange Stage</b>	
Type of Allele:	Gene Replacement
Exchanged Cassette Gene	pancreatic and duodenal homeobox 1 [Mus musculus] (Pdx1 - <a href="#">NCBI GeneID:18609</a> )
Exchanged Cassette Allele Name	Pdx1 <sup>rTTA</sup>
Description of Exchange Vector	The Pdx1.rTTA vector was made on a backbone of a basal exchange vector which contains an 8.610 kb sequence from the Pdx1 locus, Lox66/Lox2272 sites, and a flrtd (flanked by FRT) Pgk-Hygro cassette that is used for positive selection of ES cells after RMCE. The rTTA sequence was cloned into the first exon of Pdx1, right after the ATG site.
Exchange Vector Genbank File:	<a href="#">Pdx1.rTTA.gb</a>
Citations	Not Available

**Associated Images****Image 1****Description:**

The Pdx1<sup>rTTA</sup> vector was exchanged into the Pdx1<sup>LCA</sup> allele via Recombinase Mediated Cassette Exchange (RMCE).


**Reference:**

Not provided

**Access Status**

 This resource is publicly viewable.

**Request this Resource**

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Primary contributor: [Magnuson Lab](#)


Co-contributed by:

- [BCBC Mouse / ES Cell Core](#)

**Resource Tags**

embryonic, es, esc, Pdx1<sup>rTTA</sup>, stem, TL-1


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**Resource History & Actions**

Approved on Dec 22, 2011

Last modified on Sep 11, 2012

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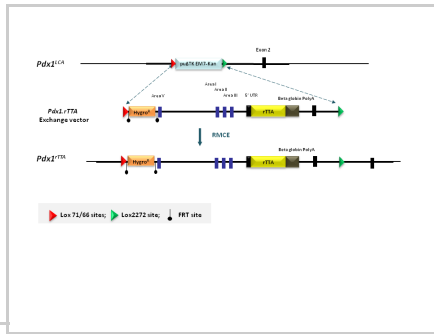
**Related resources****BCBC**

No matching resources

**Other Consortia**

No matching resources

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



## Repositories

BCBC members may [Login](#) to request this resource.

## Contact Information

### Preferred Contact

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## Associated Publications

*No publications associated*

## Comments

*There are no comments for this entry.*

