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Insm1^{Pdx1.YFP} - ES Cell Line RES4072**ESC Line Information**

Cell Line Name:	Insm1 ^{Pdx1.YFP}
Parental Cell Line:	TL-1
Background Strain:	129
Culturing Protocol:	<i>Not provided.</i>
Description:	This ES cell line contains bidirectional TetO-regulated genes inserted into the Insm1 ^{LCA} allele by RMCE. In one direction, the TetO/CMV promoter drives the expression of the transcription factor Pdx1. In the other direction, it drives the expression of yellow fluorescent protein (YFP). In this cell line, when the effector protein rTA is expressed, Pdx1 and YFP will be over-expressed simultaneously upon administration of doxycycline.

Genetic Alterations

1) RMCE Targeted Mutagenesis	
Type of Allele	Cassette Acceptor
Targeted Gene	insulinoma-associated 1 (Insm1 - NCBI GeneID:53626)
Targeted Allele	targeted mutation 1 (Insm1 ^{tm1(LCA)} - MGI:1859980)
Description of Targeting Vector	This LCA uses a lox 66/71 and lox 2272 strategy for RMCE and allows a ~5.2 kb region of this single exon gene to be manipulated. This enables a variety of different types of experiments to be performed using a range of cassette designs.
Targeting Vector Genbank File	Insm1.GT.gb
Recombinase-Mediated Cassette Exchange Stage	
Type of Allele:	Gene Replacement
Exchanged Cassette Gene	pancreatic and duodenal homeobox 1 (MGI:18609)
Exchanged Cassette Allele Name	Pdx1/YFP
Description of Exchange Vector	The phygro66.2272.Pdx1.YFP exchange vector was made on a backbone of a basal exchange vector which contains Lox66/Lox2272 sites and a flrtd (flanked by FRT) Pgk-Hygro cassette that is used for positive selection of ES cells after RMCE. Bidirectional Tet-O regulated genes Pdx1 and YFP were inserted between the Pkg-Hygro and Lox2272 sites.
Exchange Vector Genbank File:	phygro66.2272.Pdx1.YFP.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: [Magnuson Lab](#)
Co-contributed by:
• [BCBC Mouse / ES Cell Core](#)

Resource Tags

embryonic, es, esc, Insm1^{Pdx1.YFP}, stem, TL-1

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Resource History & Actions

Approved on Dec 21, 2011
Last modified on Apr 22, 2015

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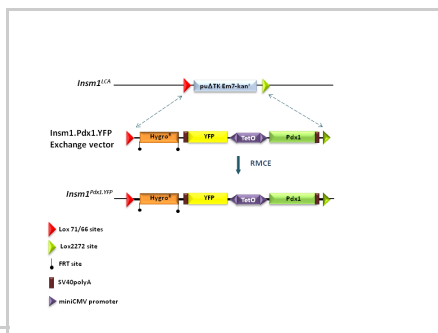
Related resources**BCBC**

No matching resources

Other Consortia

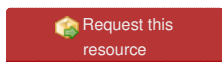
No matching resources

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



Repositories

Magnuson Lab



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

Contact Information

Preferred Contact

Name	Mark Magnuson
Institution	Vanderbilt University
Phone	615-322-7006
Email	mark.magnuson@vanderbilt.edu

Associated Publications

No publications associated

Comments

There are no comments for this entry.

