

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


Rosa26^{228.3TF.GFP-Cre} - Mouse Strain RES4537**Mouse Information**

Common Name:	Rosa26 ^{228.3TF.GFP-Cre}
MGI Official Name:	Rosa26 ^{228.3TF.GFP-CreMgn}
Description:	This mouse strain contains TetO-regulated genes inserted into the Rosa 26 ^{LCA} allele by RMCE. TetO/miniCMV promoter is placed at -228 position upstream of putative ROSA26 transcription start site and drives the expression of a polycistronic mRNA with transcription factors MafA, Pdx1, and Ngn3 together with GFP-Cre fusion protein linked by 2A peptide cleavage sequences. These mice will be able to simultaneously over-express all three transcription factors and GFP-Cre upon administration of doxycycline when the effector protein rTA is expressed.
Categories:	Fluorescent Probes Tet


Genetic Alterations

1) RMCE Targeted Mutagenesis	
Type of Allele	Cassette Acceptor
Targeted Gene	gene trap ROSA 26, Philippe Soriano (Gt(ROSA)26Sor - NCBI GeneID:14910)
Targeted Allele	targeted mutation 1 (Rosa26 ^{tm1(LCA)} - MGI:104735)
Description of Targeting Vector	The Rosa 26 cassette acceptor allele was created by replacing a 5.165 kb region of this gene containing exon 1 with a floxed tk-neo cassette, a puromycin-delta-thymidine kinase fusion gene driven by the mouse phosphoglycerol kinase promoter (pU-deltaTK) and a neomycin resistant gene driven by the bacterial EM7 promoter (EM7neo) flanked by minimal (34 bp) tandemly oriented lox71 and lox2272 sites.
Targeting Vector Genbank File	pRosa26.LCA.gb
Recombinase-Mediated Cassette Exchange Stage	
Type of Allele:	Gene Replacement
Exchanged Cassette Gene	Gt(ROSA)26Sor gene trap ROSA 26, Philippe Soriano [Mus musculus] (Gt(ROSA)26Sor - NCBI GeneID:14910)
Exchanged Cassette Allele Name	ROSA26 ^{228.3TF.GFP-Cre}
Description of Exchange Vector	The pR26.228.ptight.3TF.GFP.Cre vector was made on a backbone of a basal construct containing a 4.081 kb gene sequence from the Rosa26 promoter sequence removed by gene targeting in Rosa26.LCA allele, Lox66/Lox2272 sites and a flrtd (flanked by FRT) Pkg-Neo cassette for positive selection of ES cells after RMCE. TetO/miniCMV promoter from the pTight vector (Clontech) was inserted at -228 position upstream of the putative ROSA26 transcription start site, followed by a polycistronic mRNA coding for MafA, GFP-Cre, Pdx1, and Ngn3 linked by 2A peptide cleavage sequences.
Exchange Vector Genbank File:	R26.228.ptight.3TF.GFP.CRE.gb
Citations	Not Available

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

mouse, mouse strain, Rosa26^{228.3TF.GFP-Cre}, Rosa26^{228.3TF.GFP-CreMgn}


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Resource History & Actions

Approved on Nov 29, 2012

Last modified on Sep 13, 2012

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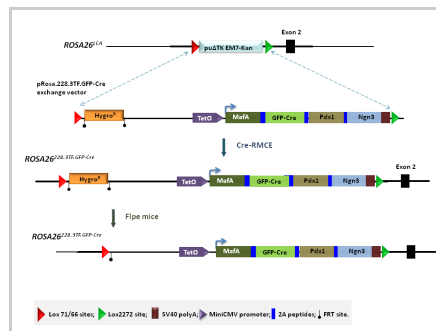
Data courtesy of [dkCOIN](#). Only public resources are displayed.

Strain Information

Strain Type:	Mixed
Chimera/Founder Genetic Background:	129S6/SvEvTac
Current Genetic Background:	C57BL/6J (date recorded: 09/11/2012)
Strain Description:	Not provided

Associated Images

Image 1



Description:

The pRosa.228.3TF.GFP-Cre vector was exchanged into the ROSA26^{LCA} and mice were generated from the correctly exchanged mESCs.

Subsequently, these animals were mated to Flpe mice in order to delete the Hygro^R cassette.

Reference:

Not provided

Repositories

Magnuson Lab

 Request this resource

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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