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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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No matching resources

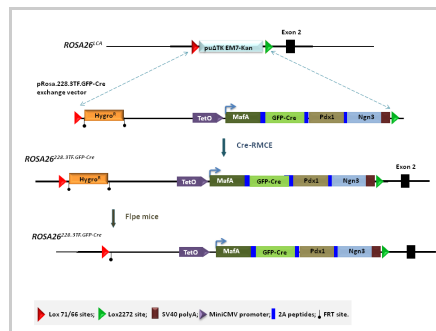
Data courtesy of [dkCOIN](#). Only public resources are displayed.

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.

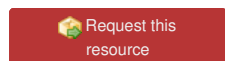
Subsequently, these animals were mated to Flpe mice in order to delete the Hygro^R cassette.

Reference:

Not provided

Repositories

Magnuson Lab



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.

