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Rosa26^{Ngn3.CFP} - Mouse Strain RES2582**Mouse Information**

Common Name:	Rosa26 ^{Ngn3.CFP}
MGI Official Name:	Rosa26 ^{(Ngn3.CFP)Mgn}
Description:	This mouse contains a bidirectional TetO-regulated fusion gene that has been inserted into a disabled Rosa26 locus. In one direction the tetO/CMV promoter drives expression of CFP (Cerulean). In the other direction it drives Ngn3. Mice containing this allele can be used to drive the expression of Ngn3 under control of both doxycycline and either an rTA or tTA transgene.
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:	Conditional Activating
Exchanged Cassette Gene	neurogenin 3 (Neurog3 - NCBI GeneID:11925)
Exchanged Cassette Allele Name	Rosa26 ^{Ngn3.CFP}
Description of Exchange Vector	Through homologous recombination in ES cells, a 5.165 kb region of the Rosa26 gene containing exon 1 was replaced by a floxed tk-neo cassette, a puromycin-delta-TK fusion gene driven by the mouse phosphoglycerol kinase promoter (pUdelta-TK) and a neomycin resistant gene driven by the bacterial EM7 promoter (EM7neo) flanked by minimal (34 bp) tandemly oriented lox71 and lox2272 sites (Cre-recombinase recognition sequences).
Exchange Vector Genbank File:	phygro66.2272.rv.ngn3.cfp.gb
Citations	Not Available


Strain Information

Strain Type:	Mixed
Chimera/Founder Genetic Background:	129S6/SvEvTac
Current Genetic Background:	C57BL/6J (date recorded: 07/31/2012)

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

mESC Core, mouse, mouse strain, RMCE, Rosa26, Rosa26^{Ngn3.CFP}, Rosa26^{(Ngn3.CFP)Mgn}, undefined

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Resource History & Actions

Approved on Nov 25, 2009
Last modified on Jul 31, 2012

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Related resources**BCBC**

No matching resources

Other Consortia

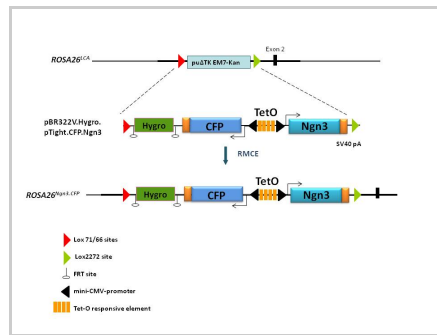
No matching resources

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

Strain Description: This mouse line is currently being backcrossed to C57Bl/6J. Currently on the 5th cross.

Associated Images

Image 1



Description:

A bidirectional TetO-regulated fusion gene was inserted into a disabled Rosa26 loxed cassette acceptor allele by RMCE, as shown. The TetO-regulated reporter drives expression of CFP (Cerulean) in one direction and Ngn3 in the other. The pgk-hygromycin resistance cassette is flanked by tandem FRT sites to enable easy removal after germline transmission with FlpE.

Reference:

Not provided

Repositories

MMRRC

[Request via www.mmrc.org website](http://www.mmrc.org)

Stock #: 036636-MU

Availability Notes: *Not provided*

Magnuson Lab

[Request this resource](#)

Stock #: VUMC, MM1-MM10, MM BSID 0084

Availability Notes: Sperm cryo

Contact Information

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Associated Publications

No publications associated

Comments

There are no comments for this entry.

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