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**Rosa26<sup>Ngn3.CFP</sup> - Mouse Strain RES2582****Mouse Information**

<b>Common Name:</b>	Rosa26 <sup>Ngn3.CFP</sup>
<b>MGI Official Name:</b>	Rosa26 <sup>(Ngn3.CFP)Mgn</sup>
<b>Description:</b>	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.
<b>Categories:</b>	Fluorescent Probes Tet


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

<b>Type of Allele</b>	Cassette Acceptor
<b>Targeted Gene</b>	gene trap ROSA 26, Philippe Soriano (Gt(ROSA)26Sor - <a href="#">NCBI GeneID:14910</a> )
<b>Targeted Allele</b>	targeted mutation 1 (Rosa26 <sup>tm1(LCA)</sup> - <a href="#">MGI:104735</a> )
<b>Description of Targeting Vector</b>	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.
<b>Targeting Vector Genbank File</b>	<a href="#">pRosa26.LCA.gb</a>
<b>Recombinase-Mediated Cassette Exchange Stage</b>	
<b>Type of Allele:</b>	Conditional Activating
<b>Exchanged Cassette Gene</b>	neurogenin 3 (Neurog3 - <a href="#">NCBI GeneID:11925</a> )
<b>Exchanged Cassette Allele Name</b>	Rosa26 <sup>Ngn3.CFP</sup>
<b>Description of Exchange Vector</b>	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).
<b>Exchange Vector Genbank File:</b>	<a href="#">phygro66.2272.rv.ngn3.cfp.gb</a>
<b>Citations</b>	Not Available


**Strain Information**

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

**Access Status**

 This resource is publicly viewable.


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Primary contributor: [Magnuson Lab](#)  
Co-contributed by:  
• [BCBC Mouse / ES Cell Core](#)

**Resource Tags**


mESC Core, mouse, mouse strain, RMCE, Rosa26, Rosa26<sup>Ngn3.CFP</sup>, Rosa26<sup>(Ngn3.CFP)Mgn</sup>, undefined

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**Resource History & Actions**

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

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No matching resources

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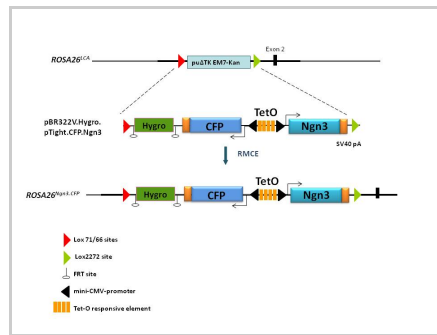
No matching resources

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

### Preferred Contact

<b>Name</b>	Mark Magnuson
<b>Institution</b>	Vanderbilt University
<b>Phone</b>	615-322-7006
<b>Email</b>	<a href="mailto:mark.magnuson@vanderbilt.edu">mark.magnuson@vanderbilt.edu</a>

## Associated Publications

*No publications associated*

## Comments

*There are no comments for this entry.*

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