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**Rosa26<sup>(YFP)Mgn</sup> - Mouse Strain RES4055****Mouse Information**

<b>Common Name:</b>	Rosa26 <sup>(YFP)Mgn</sup>
<b>MGI Official Name:</b>	Rosa26 <sup>tm4Mgn</sup>
<b>Description:</b>	This mouse line was made by RMCE in the Rosa26[LCA] allele and has yellow fluorescent protein (YFP, Citrine) expressed under control of the ROSA26 promoter. The YFP sequence is preceded by a translational enhancer and followed by intron-containing rabbit beta-globin polyA sequences. This mouse has ubiquitously expressed YFP protein and can be used for transplantation and other experiments where tracing of source cells is required.
<b>Categories:</b>	Fluorescent Probes


**Genetic Alterations**

<b>1) RMCE Targeted Mutagenesis</b>					
<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>	Global Null				
<b>Exchanged Cassette Gene</b>	Not provided.				
<b>Exchanged Cassette Allele Name</b>	YFP				
<b>Description of Exchange Vector</b>	The pRosa.EN.YFP.bGspliceA.Neo vector was made on a backbone of a basal exchange vector which contains a 4.081 kb sequence from the Rosa26 locus, Lox71/Lox2272 sites, and a flrtd (flanked by FRT) P <sub>gk</sub> -Neo cassette that is used for positive selection of ES cells after RMCE. A 5' translational enhancer-YFP- intron-containing rabbit beta-globin polyA sequence was inserted (in place of Rosa26 exon 1), between the Lox71 and P <sub>gk</sub> -Neo sites.				
<b>Exchange Vector Genbank File:</b>	<a href="#">pRosa.EN.YFP.bGspliceA.neo.gb</a>				
<b>Citations</b>	<table border="1"> <thead> <tr> <th>PubMedID</th> <th>Citation</th> </tr> </thead> <tbody> <tr> <td><a href="#">21324933</a></td> <td><a href="#">Quantification of factors influencing fluorescent protein expression using RMCE to generate an allelic series in the ROSA26 locus in mice. (2011) Dis Model Mech 4: 537-47 (Added 2012-09-24 16:36:23.369844)</a></td> </tr> </tbody> </table>	PubMedID	Citation	<a href="#">21324933</a>	<a href="#">Quantification of factors influencing fluorescent protein expression using RMCE to generate an allelic series in the ROSA26 locus in mice. (2011) Dis Model Mech 4: 537-47 (Added 2012-09-24 16:36:23.369844)</a>
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**Access Status**

 This resource is publicly viewable.


**Request this Resource**

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

**Resource Tags**


mouse, mouse strain, Rosa26<sup>tm4Mgn</sup>, Rosa26<sup>(YFP)Mgn</sup>

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**Resource History & Actions**

Approved on Dec 21, 2011  
Last modified on Jul 31, 2012

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No matching resources

**Other Consortia**

No matching resources

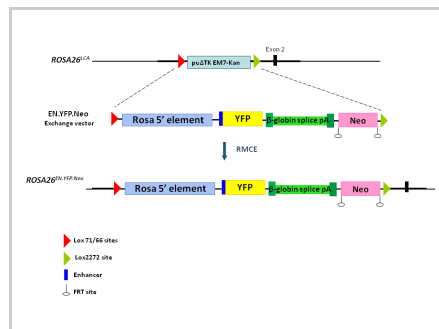
Data courtesy of [dkCOIN](#). Only public resources are displayed.

## Strain Information

Strain Type:	Mixed
Chimera/Founder Genetic Background:	129S6/SvEvTac
Current Genetic Background:	C57BL/6J (date recorded: 07/31/2012)
Strain Description:	Not provided

## Associated Images

Image 1

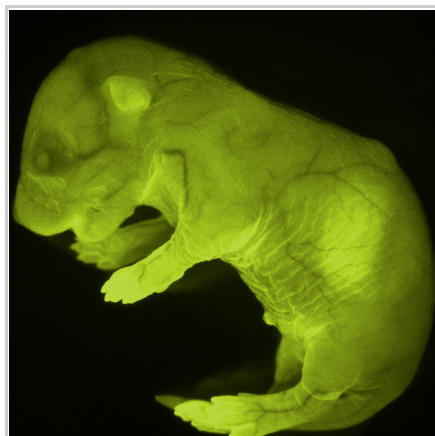

**Description:**

Not provided

**Reference:**

Not provided

Image 2

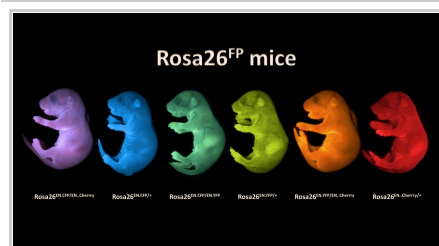

**Description:**

The image of Rosa26<sup>YFP/+</sup> mouse was taken with a stereoscope using YFP filter.

**Reference:**

Not provided

Image 3


**Description:**

The images of newborn offspring from intercrosses of Rosa26<sup>Cherry/+</sup>, Rosa26<sup>CFP/+</sup> and Rosa26<sup>YFP/+</sup> mice were taken with a stereoscope using CFP, YFP and RFP filter and subsequently overlaid.

**Reference:**

Not provided

## Repositories

**MMRRC**

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

Stock #: 036289-MU

Availability Notes: Not provided

## Contact Information

**Preferred Contact**

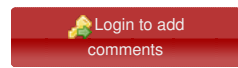
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## Associated Publications

No publications associated

## Comments

*There are no comments for this entry.*



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