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**Rosa26<sup>(Setd5.GFP)</sup>Mgn - Mouse Strain RES4147****Mouse Information**

<b>Common Name:</b>	Rosa26 <sup>(Setd5.GFP)</sup> Mgn
<b>MGI Official Name:</b>	Rosa26 <sup>(Setd5.GFP)</sup> Mgn
<b>Description:</b>	This mouse line was generated by RMCE in the Rosa26 <sup>[LCA]</sup> allele. A coding sequence for green fluorescent protein (GFP) was inserted into the first exon of the Setd5 gene. This exon is located upstream of the Rosa26 transcribed sequence and is transcribed in an opposite orientation. The GFP-polyA cassette, transcribed from the Setd5 promoter, knocks out Setd5 transcription and provides a reporter for Setd5 gene expression. The purpose of this mouse line is to study the molecular function of the Setd5 gene.
<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.

**Targeting Vector Genbank File** [pRosa26\\_LCA.gb](#)

**Recombinase-Mediated Cassette Exchange Stage**


<b>Type of Allele:</b>	Gene Replacement
<b>Exchanged Cassette Gene</b>	SET domain containing 5 (Setd5 - <a href="#">NCBI GeneID:72895</a> )
<b>Exchanged Cassette Allele Name</b>	Setd5/GFP

**Description of Exchange Vector**  
The pRosa26.Ex1.Setd5GFP exchange vector was made on a backbone of a basal Rosa26 exchange vector which contains a 5.166 kb sequence from the Rosa26 locus, Lox71/Lox2272 sites, and a flrtd (flanked by FRT) Pgk-Hygro selection cassette that is used for positive selection after RMCE. A GFP-SV40 polyA sequence was inserted into exon1 of the Setd5 gene. It is located upstream of Rosa26 exon 1 and is transcribed in the opposite orientation.


**Exchange Vector Genbank File:** [pRosa26.Ex1.Setd5GFP.gb](#)

Citations	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.</a> (2011) <i>Dis Model Mech</i> 4: 537-47 (Added 2012-09-24 16:36:23.369844)

**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<sup>(Setd5.GFP)</sup>Mgn

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**Resource History & Actions**

Approved on Dec 22, 2011  
Last modified on Dec 19, 2011

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**Related resources****BCBC**

No matching resources

**Other Consortia**

No matching resources

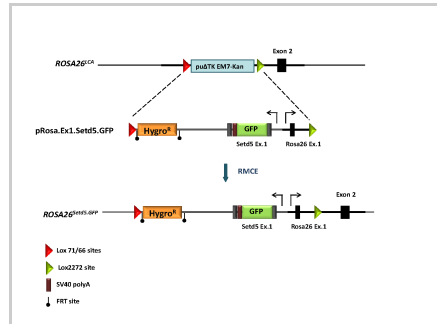
Data courtesy of [dkCOIN](#). Only public resources are displayed.

## Strain Information

Strain Type:	Mixed
Chimera/Founder Genetic Background:	129S6/SvEvTac
Current Genetic Background:	C57BL/6 (date recorded: 11/23/2011)
Strain Description:	Not provided

## Associated Images

Image 1

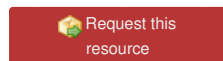


**Description:**  
Not provided

**Reference:**  
Not provided

## Repositories

### Magnuson Lab



**Stock #:** Not provided  
**Availability Notes:** Not provided

### MMRRC



**Stock #:** 36985-JAX  
**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.

