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**Rosa26<sup>MafA-Cherry</sup> - Mouse Strain RES2702****Mouse Information**

<b>Common Name:</b>	Rosa26 <sup>MafA-Cherry</sup>
<b>MGI Official Name:</b>	Rosa26 <sup>tm1.4(MafA-Cherry)Mgn</sup>
<b>Description:</b>	This mouse contains a bidirectional Tet0-regulated fusion gene that has been inserted into a disabled Rosa26 loxed cassette acceptor allele by RMCE. In one direction the tetO/CMV promoter drives expression of a red fluorescent protein (Cherry) while in the other direction it drives MafA expression.
<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>	v-maf musculoaponeurotic fibrosarcoma oncogene family, protein A (avian) (MafA - <a href="#">NCBI GeneID:378435</a> )
<b>Exchanged Cassette Allele Name</b>	Rosa26 <sup>MafA-Cherry</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 is 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.mafa.cherry.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: 03/27/2015)

**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<sup>MafA-Cherry</sup>

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**Resource History & Actions**

Approved on Dec 22, 2009  
Last modified on Jun 13, 2011

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**Related resources****BCBC**

No matching resources

**Other Consortia**

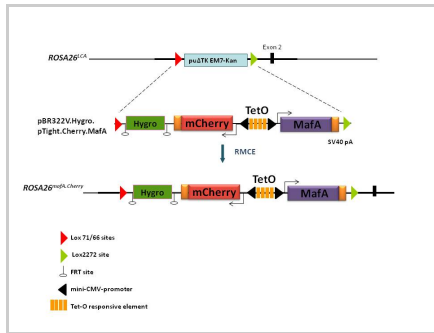
No matching resources

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

**Strain Description:** Germline male chimeras are currently being backcrossed to C57BL6/J female mice.

### 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 RFP (mCherry) in one direction and MafA 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

Magnuson Lab

[Request this resource](#)

**Stock #:** VUMC, MN1-MN10, MN BSID 0085  
**Availability Notes:** *Not provided*

### Contact Information

Preferred Contact

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### Associated Publications

*No publications associated*

### Comments



03/11/2012 02:34 PM  
[Mark Magnuson](#)

This mouse line was generated, but it was found to be very highly variegated at the outset and the allele ceased functioning within several generations. For this reason, the line was terminated.



09/14/2011 01:38 PM  
[Mark Magnuson](#)

This allele is highly variegated and appears to have undergone gene silencing after several generations of breeding.

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