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**Rosa26<sup>R26-228-DR5-TA-Cerulean</sup> - Mouse Strain RES1281****Mouse Information**

<b>Common Name:</b>	Rosa26 <sup>R26-228-DR5-TA-Cerulean</sup>
<b>MGI Official Name:</b>	Rosa26 <sup>tm1.2(R26-228-DR5-TA-Cerulean)Mgn</sup>
<b>Description:</b>	These mice were generated using RMCE to insert an exchange vector containing a modified Rosa26 promoter linked to a Cerulean fluorescent protein (CFP) reporter gene into mESCs containing a Loxed Cassette Acceptor (LCA) allele within the Rosa26 gene locus. The Rosa26 promoter in this mouse was altered by replacing DNA sequences from -228 to +81 with a multimerized retinoic acid response element (DR5) fused to a TATA box. This mouse will facilitate studies of retinoic acid signaling in an intact animal.
<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>	Not available
<b>Exchanged Cassette Gene</b>	Not provided. ( <a href="#">MGI:14910</a> )
<b>Exchanged Cassette Allele Name</b>	Rosa26 <sup>tm1.2((R26-228-DR5-Cerulean)</sup>
<b>Description of Exchange Vector</b>	Rosa26 <sup>((R26-228-DR5-TA-Cerulean))</sup>
<b>Exchange Vector Genbank File:</b>	<a href="#">R26228DR5TACerulean.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)
<b>Strain Description:</b>	129S6 germline chimeras were backcrossed for two generations to C57BL/6J.

**Associated Images****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>R26-228-DR5-TA-Cerulean</sup>

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**Resource History & Actions**

Approved on Mar 19, 2009

Last modified on Jun 27, 2011

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**Related resources****BCBC**

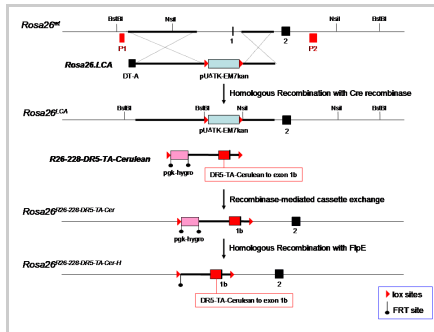
No matching resources

**Other Consortia**

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

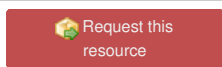
## Image 1

**Description:**

A Rosa26 RMCE plasmid constructed, made for use with the Rosa26 acceptor allele, was modified by replacing the sequences from -228 to +81 with a retinoic acid response element (DR5) fused to a TATA-CFP reporter. The resulting mouse ESCs will enable the feasibility of inserting signaling sentinel cassettes into a facilitating chromosomal locus to be directly tested.

**Reference:**

*Not provided*

**Repositories****Magnuson Lab**

**Stock #:** VUMC, KW BSID 0068

**Availability Notes:** *Not provided*

**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**

Publication	Citation
<a href="#">22888097</a>	Serup P, Gustavsen C, Klein T, Potter LA, Lin R, Mullanpudi N, Wandzioch E, Hines A, Davis A, Bruun C, Engberg N, Petersen DR, Peterslund JM, Macdonald RJ, Grapin-Botton A, Magnuson MA, Zaret KS <u>Partial promoter substitutions generating transcriptional sentinels of diverse signaling pathways in embryonic stem cells and mice.</u> (2012) <i>Dis Model Mech</i> 5: 956-66 (Added March 21, 2013)

**Comments**

*There are no comments for this entry.*

