My Account
Login
Create Account

Resources
View All (813)
Adenoviruses (137)
Antibodies (175)
Bioimages (67)
Genomics Studies (145)
mESC Lines (68)
Mouse Strains (120)
Miscellaneous (46)
Protocols (55)
Research Data (4)
Resource Tags (389)
Visualization (9)

Research & Cores
Core Facilities (5)
Research Highlights (5)
Research Networks
Research Objectives

Information
About the BCBC
BCBC Events
Branding & Logos
Career Opportunities
Health
NIH hESC Registry
Policies & Guidelines
Member Publications
Research Programs
Research Investigators
Member Directory
Tutorials

Rosa26$^{R26\text{-}60\text{-}DR5\text{-}TA\text{-}Cerulean}$ - Mouse Strain RES1241

Mouse Information

Common Name:	Rosa26$^{R26\text{-}60\text{-}DR5\text{-}TA\text{-}Cerulean}$
MGI Official Name:	Rosa26$^{tm1.1(R26\text{-}60\text{-}DR5\text{-}TA\text{-}Cerulean)Mgn}$
Description:	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 -60 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.
Categories:	Fluorescent Probes

Genetic Alterations

1) RMCE Targeted Mutagenesis	
Type of Allele	Cassette Acceptor
Targeted Gene	gene trap ROSA 26, Philippe Soriano (Gt(ROSA)26Sor - NCBI GeneID:14910)
Targeted Allele	targeted mutation 1 (Rosa26$^{tm1(LCA)}$ - MGI:104735)
Description of Targeting Vector	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	
Type of Allele:	*Not available*
Exchanged Cassette Gene	Not provided. (MGI:14910)
Exchanged Cassette Allele Name	Rosa26$^{tm1.1(R26\text{-}DR5\text{-}TA\text{-}Cerulean)}$
Description of Exchange Vector	Rosa26{R26-60-DR5-TA-Cerulean}
Exchange Vector Genbank File:	pRosa26.LCA.gb
Citations	Not Available

Strain Information

Strain Type:	Mixed
Chimera/Founder Genetic Background:	129S6/SvEvTac
Current Genetic Background:	129S6 X C57BL6/J (date recorded: 03/27/2015)
Strain Description:	Germline 129S6 chimeras were backcrossed to C57BL6/J for two generations.

Associated Images

Image 1

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$^{R26\text{-}60\text{-}DR5\text{-}TA\text{-}Cerulean}$

Login to edit tags

Read more about tags

Resource History & Actions

Approved on Mar 13, 2009
Last modified on Jun 28, 2011

Login to edit or request an edit

Related resources

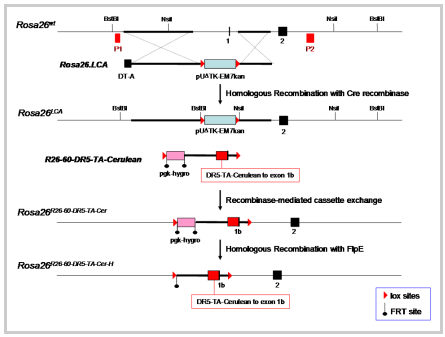
BCBC

No matching resources

Other Consortia

No matching resources

Data courtesy of dkCOIN. Only public resources are displayed.



Description:

A Rosa26 RMCE plasmid constructed, made for use with the Rosa26 acceptor allele, was modified by replacing the sequences from -60 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

Request this resource

Stock #: VUMC, KV BSID 0067
Availability Notes: *Not provided*

Contact Information

Preferred Contact	
Name	Mark Magnuson
Institution	Vanderbilt University
Phone	615-322-7006
Email	mark.magnuson@vanderbilt.edu

Associated Publications

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

Comments

There are no comments for this entry.

Login to add comments