

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^{R26-60-DR5-TA-Cerulean} - ES Cell Line RES981**ESC Line Information**

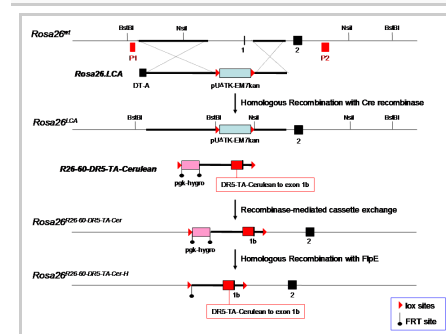
Cell Line Name:	Rosa26 ^{R26-60-DR5-TA-Cerulean}
Parental Cell Line:	TL-1 / Rosa26(LCA) clone 5B9
Background Strain:	129
Culturing Protocol:	Std_mESC_Culture.doc
Description:	In these cells Rosa26 gene sequences from -60 to +81 were replaced by a retinoic acid response element (DR5) fused to a TATA-Cerulean (CFP) reporter. These ESCs may be useful for assess retinoic acid responsiveness.

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:	Gene Replacement
Exchanged Cassette Gene	tumor necrosis factor receptor superfamily, member 10b (DR5 - NCBI GeneID:21933)
Exchanged Cassette Allele Name	Rosa26 ^{R26-60-DR5-TA-Cerulean}
Description of Exchange Vector	not available
Exchange Vector Genbank File:	R2660DR5TACerulean.gb
Citations	Not Available

Associated Images

Image 1


**Description:**

In this experiment native Rosa26 gene sequences from -60 to +81 were replaced by a retinoic acid response element (DR5) fused to a TATA-Cerulean red reporter. These cells, which can be used to assess RA responsiveness, were used to test the feasibility of inserting signaling sentinel cassettes into a facilitating chromosomal locus.


Reference:

Not provided

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

CFP, DR5, embryonic, es, esc, mESC Core, Rosa26^{R26-60-DR5-TA-Cerulean}, stem, TL1-Rosa26^{LCA} 5B9

 Login to edit tags

 Read more about tags

Resource History & Actions

Approved on Feb 24, 2009

Last modified on Nov 25, 2009

 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.

Repositories

Magnuson Lab

Out of stock

Stock #: VUMC

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

No publications associated

Comments

There are no comments for this entry.

 [Login to add comments](#)

[Home](#) · [Your Account](#) · [News & Events](#) · [Resources](#) · [Policies & Guidelines](#) · [About Us](#) · [FAQ](#) · [Site Map](#)

© 2002-2015 Beta Cell Biology Consortium - All Rights Reserved. [Terms of usage and disclaimer.](#)

