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Rosa26^{R26-228-DR5-TA-Cerulean} - ES Cell Line RES982

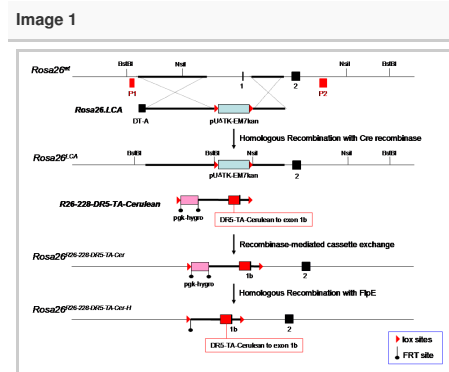
ESC Line Information

Cell Line Name:	Rosa26 ^{R26-228-DR5-TA-Cerulean}
Parental Cell Line:	TL-1 / Roas26[LCA] clone 5B9
Background Strain:	129
Culturing Protocol:	Std_mESC_Culture.doc
Description:	In these cells Rosa26 gene sequences from -228 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	Roas26 ^{R26-228-DR5-TA-Cerulean}
Description of Exchange Vector	not available
Exchange Vector Genbank File:	R26228DR5TACerulean.gb
Citations	Not Available

Associated Images



Description:
 In this experiment native Rosa26 gene sequences from -228 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

embryonic, es, esc, mESC Core, Rosa26^{R26-228-DR5-TA-Cerulean}, stem, TL1-Roas26[LCA] 5B9

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Resource History & Actions

Approved on Feb 12, 2009
 Last modified on Dec 20, 2010

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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

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Associated Publications

No publications associated

Comments

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