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Rosa26$^{R26\text{-}60\text{-}3XCNotch\text{-}TA\text{-}Cerulean}$ - ES Cell Line RES2742

ESC Line Information

Cell Line Name:	Rosa26$^{R26\text{-}60\text{-}3XCNotch\text{-}TA\text{-}Cerulean}$
Parental Cell Line:	TL-1 / Rosa26{LCA} clone 5B9
Background Strain:	129
Culturing Protocol:	Std_mESC_Culture.doc
Description:	The Rosa26 gene sequences from -228 to +81 were replaced with a repeat of alternating 32-bp C-elements and 31-bp Rbpj-binding sites (i.e.,C-R-C-R-C-R). The 31 base-pair region is derived from the CBF1/Rbpj binding region of the C-promoter of EBV (cataaattTTTTCCCACGgcgtgtttacacc; uppercase letters are the consensus Rbpj binding sequence within the 31-bp element) (Hsieh, MCB 16:952, 1996). The 32-bp C-element is from the Ela1 enhancer (Kruse et al., MCB 15:4385, 1995).

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	Not provided. (R26-60-CNotch-TA-Cerulean)
Exchanged Cassette Allele Name	Rosa26$^{(R26\text{-}60\text{-}CNotch\text{-}TA\text{-}Cerulean)}$
Description of Exchange Vector	not available
Exchange Vector Genbank File:	3xcnotchrosa2660.txt
Citations	Not Available

Associated Images

Image 1

Description:

Conceptual nucleotide sequence of the cassette for the RMCE of a synthetic Notch-signal responsive promoter for insertion/replacement into the Rosa26-LCA. This replaces native Rosa26 gene sequences from -60 to +81

Access Status

This resource is publicly viewable.

Request this Resource

Request from a repository

Primary contributor: MacDonald Lab
Co-contributed by:
- BCBC Mouse / ES Cell Core

Resource Tags

embryonic, es, esc, Rosa26$^{R26\text{-}60\text{-}3XCNotch\text{-}TA\text{-}Cerulean}$, stem, TL1-Rosa26(LCA) 5B9

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Resource History & Actions

Approved on Jan 19, 2010
Last modified on Sep 22, 2011

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Related resources

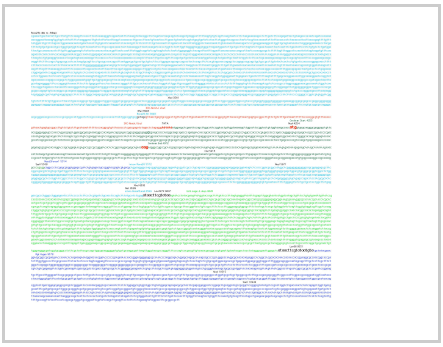
BCBC

No matching resources

Other Consortia

No matching resources

Data courtesy of dkCOIN. Only public resources are displayed.



with the Notch responsive promoter. These ES cells may be useful to monitor Notch signaling.

Light blue: Rosa26-60

Red: 3XNotch

Dark green: Cerulean

Light green: Ampicillin

Blue: Vector

Black: lox

Reference:
Not provided

Repositories

Magnuson Lab

Request this resource

Stock #: BCBC2742
Availability Notes: *Not provided*

Contact Information

Preferred Contact	
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Associated Publications

No publications associated

Comments

There are no comments for this entry.

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