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# Rosa26$^{R26\text{-}60\text{-}6XNotch\text{-}TA\text{-}Cerulean}$ - ES Cell Line RES2802

## ESC Line Information

| | |
|---|---|
| **Cell Line Name:** | Rosa26$^{R26\text{-}60\text{-}6XNotch\text{-}TA\text{-}Cerulean}$ |
| **Parental Cell Line:** | TL-1 / Rosa26{LCA} clone 5B9 |
| **Background Strain:** | 129 |
| **Culturing Protocol:** | Std_mESC_Culture.doc |
| **Description:** | The binding site for Rbpj, the transcriptional mediator of Notch signaling was inserted into the Rosa 26 locus replacing nucleotides -60 to -228.The complete insert contains the Rbpj cis element in a series of six repeats. Each repeat includes a 31 base-pair region 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 et al., MCB 16:952, 1996)." |

## 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. |
| **Exchanged Cassette Allele Name** | Rosa26(R26-60-6XNotch-TA-Cerulean) |
| **Description of Exchange Vector** | not available |
| **Exchange Vector Genbank File:** | 6xnotchrosa2660.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

## 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$^{R26\text{-}60\text{-}6XNotch\text{-}TA\text{-}Cerulean}$, stem, TL1-Rosa26(LCA) 5B9

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## Resource History & Actions

Approved on Jan 20, 2010
Last modified on Dec 20, 2010

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## Related resources

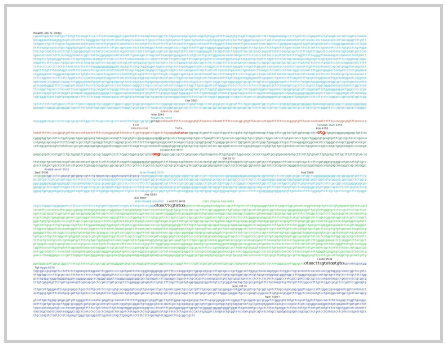
### BCBC

*No matching resources*

### Other Consortia

*No matching resources*

Data courtesy of dkCOIN. Only public resources are displayed.



sequences from -60 to +81 with the Notch responsive promoter. These ES cells may be useful to monitor Notch signaling.

Light blue: Rosa26-60

Red: 6XNotch

Dark green: Cerulean

Light green: Ampicillin

Blue: Vector

Black: lox

**Reference:**
*Not provided*

## Repositories

**Magnuson Lab**

Request this resource

**Stock #:** BCBC2802
**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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