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Rosa26^{Setd5.GFP} - ES Cell Line RES4056**ESC Line Information**

Cell Line Name:	Rosa26 ^{Setd5.GFP}
Parental Cell Line:	TL-1
Background Strain:	129
Culturing Protocol:	<i>Not provided.</i>
Description:	This ES cell line was generated by RMCE in the Rosa26 ^{LCA} allele. A coding sequence for green fluorescent protein (GFP) was inserted into the first exon of the Setd5 gene. This exon is located upstream of the Rosa26 transcribed sequence and is transcribed in an opposite orientation. The GFP-polyA cassette, transcribed from the Setd5 promoter, knocks out Setd5 transcription and provides a reporter for Setd5 gene expression. The purpose of this cell line is to study the molecular function of the Setd5 gene.

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	SET domain containing 5 (Setd5 - NCBI GeneID:72895)
Exchanged Cassette Allele Name	Setd5/GFP
Description of Exchange Vector	The pRosa26.Ex1.Setd5GFP exchange vector was made on a backbone of a basal Rosa26 exchange vector which contains a 5.166 kb sequence from the Rosa26 locus, Lox71/Lox2272 sites, and a flrtd (flanked by FRT) Pgk-Hygro selection cassette that is used for positive selection after RMCE. A GFP-SV40 polyA sequence was inserted into exon1 of the Setd5 gene. It is located upstream of Rosa26 exon 1 and is transcribed in the opposite orientation.


Exchange Vector Genbank File: [pRosa26.Ex1.Setd5GFP.gb](#)

PubMedID	Citation
21324933	Quantification of factors influencing fluorescent protein expression using RMCE to generate an allelic series in the ROSA26 locus in mice. (2011) <i>Dis Model Mech</i> 4: 537-47 (Added 2012-09-24 16:36:23.369844)

Access Status

 This resource is publicly viewable.


Request this Resource

 Request from a repository

Primary contributor: [BCBC Mouse / ES Cell Core](#)

Resource Tags


embryonic, es, esc, Rosa26^{Setd5.GFP}, stem, TL-1

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Resource History & Actions

Approved on Dec 21, 2011
Last modified on Dec 21, 2011

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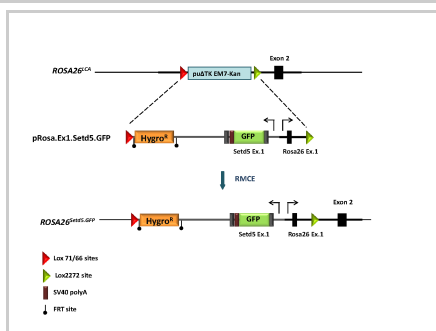
Other Consortia
No matching resources

Data courtesy of [dkCOIN](#). Only public resources are displayed.

PubMedID Citation

Associated Images

Image 1



Description:

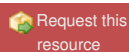
Not provided

Reference:

Not provided

Repositories

Magnuson Lab



Stock #: *Not provided*

Availability Notes: *Not provided*

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Associated Publications

No publications associated

Comments

There are no comments for this entry.

