Mouse Information

Common Name: Rosa26[228.AR8.TA.mCherry]Mgn

MGI Official Name: Gt(ROSA)26Sor tm2.1(mix1b-mCherry)Mgn

Description: This mouse line was generated by RMCE in the Rosa26[LCA] allele. In this mouse line, the Rosa26 gene sequence (-228 to +81) was replaced by the Foxh1/Smad2-dependent, Mix2-derived Activin response element (AR8) fused to a TATA-mCherry reporter. These mice may be useful to assess Activin, Nodal, and TGFbeta responsiveness.

Categories: Fluorescent Probes

Genetic Alterations

1) RMCE Targeted Mutagenesis

Type of Allele: Cassette Acceptor

Targeted Gene: gene trap ROSA 26, Philippe Soriano

Targeted Allele: targeted mutation 1 (Rosa26tm1(LCA) - NCBI GeneID:14910 - 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: Activin Response Element (R26-228-AR8-TA-mCherry)

Exchanged Cassette Allele Name: Rosa26[R26-228-AR8-TA-mCherry]

Description of Exchange Vector: The pRosa26-228 AR8 TA-Cherry vector was made on a backbone of a basal exchange vector which contains a 5.166 kb sequence from the Rosa26 locus, Lox71.Lox2272 sites, and a f insert (flanked by FRT) Pglk-Neo cassette that is used for positive selection of ES cells after RMCE. The Rosa26 gene sequence (-228 to +81) was replaced by the Foxh1/Smad2-dependent, Mix2-derived Activin response element (AR8) fused to a TATA-mCherry reporter.

Exchange Vector Genbank File: pr26228_ar8_tacherry.gb

Citations: Not Available

Strain Information

Strain Type: Mixed

Chimera/Founder Genetic Background: 129S6/SvEvTac

Current Genetic Background: C57BL/6 (date recorded: 11/29/2011)

Strain Description: Not provided
Associated Images

Image 1

Repositories

MMRRC

Stock #: 036911
Availability Notes: Not provided

Serup Lab

Stock #: Not provided
Availability Notes: Not provided

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Associated Publications

Publication: 22888097

Comments
There are no comments for this entry.