Rosa26(CFP)Mgn - Mouse Strain RES4054

Mouse Information

Common Name: Rosa26(CFP)Mgn
MGI Official Name: Rosa26(CFP)Mgn
Description: This mouse line was made by RMCE in the Rosa26[LCA] allele and has a cyan fluorescent protein (CFP; Cerulean) expressed under the control of the ROSA26 promoter. The CFP sequence is preceded by a translational enhancer and followed by intron-containing rabbit beta-globin polyA sequences. This mouse has ubiquitously expressed CFP protein and can be used for transplantation and other experiments where tracing of source cells is required.

Categories: Fluorescent Probes

Genetic Alterations

1) RMCE Targeted Mutagenesis

<table>
<thead>
<tr>
<th>Type of Allele</th>
<th>Cassette Acceptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted Gene</td>
<td>gene trap ROSA 26, Philippe Soriano (Gt(Rosa26^{Sor}) - NCBI GeneID:14910)</td>
</tr>
<tr>
<td>Targeted Allele</td>
<td>targeted mutation 1 (Rosa26^{P1(LCA)}, MGI:104725)</td>
</tr>
<tr>
<td>Description of Targeting Vector</td>
<td>Not available</td>
</tr>
<tr>
<td>Targeting Vector Genbank File</td>
<td>pRosa26.LCA.gb</td>
</tr>
</tbody>
</table>

Recombinase-Mediated Cassette Exchange Stage

| Type of Allele: | Global Null |
| Exchanged Cassette Gene | Not provided. |
| Exchanged Cassette Allele Name | CFP |

Description of Exchange Vector: The pRosa.EN.CFP.bGeneSpliceA.Neo exchange vector was made on a backbone of a basal exchange vector which contains a 4.081 kb sequence from the Rosa26 locus, Lox71/Lox2272 sites, and a flanked (fanked by FRT) Pgk-Neo cassette that is used for positive selection of ES cells after RMCE. A 9’ translational enhancer-CFP, intron-containing rabbit beta-globin polyA sequence was inserted (in place of Rosa26 exon 1), between the Lox71 and the Pgk-Neo sites.

Exchange Vector Genbank File: prosa.en.cfp.genesplice.a.neo.gb

Citations

<table>
<thead>
<tr>
<th>PubMedID</th>
<th>Citation</th>
</tr>
</thead>
</table>

Strain Information

| Strain Type: | Mixed |
| Chimera/Founder Genetic Background: | 129S6/SvEvTac |
| Current Genetic Background: | C57BL/6J (date recorded: 07/31/2012) |
Strain Description: Not provided

Associated Images

Image 1
Description: Not provided
Reference: Not provided

Image 2
Description: The image of Rosa26^{CFP+} was taken with a stereoscope using CFP filter.
Reference: Not provided

Image 3
Description: The images of newborn offspring from intercrosses of Rosa26^{Cherry/+}, Rosa26^{CFP+} and Rosa26^{YFP+} mice were taken with a stereoscope using CFP, YFP and RFP filter and subsequently overlayed.
Reference: Not provided

Repositories
Magnuson Lab
Stock #: Not provided
Availability Notes: Not provided

MMRRC
Stock #: 036288-MU
Availability Notes: Not provided

Contact Information
Preferred Contact
Name: Mark Magnuson
Institution: Vanderbilt University
Phone: 615-322-7006
Email: mark.magnuson@vanderbilt.edu

Associated Publications
No publications associated

Comments
There are no comments for this entry.