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Rosa26^{EN.CFP.SV40.Neo} - ES Cell Line RES2522**ESC Line Information**

Cell Line Name:	Rosa26 ^{EN.CFP.SV40.Neo}
Parental Cell Line:	TL-1 / Rosa26[LCA] clone 5B9
Background Strain:	129
Culturing Protocol:	std_mesc_culture.doc
Description:	This ES cell line contains CFP (Cerulean) inserted into a Rosa26 LCA allele by recombinase mediated cassette exchange. These cells were used to identify the optimal arrangement of regulatory elements for fluorescent protein expression from a single genomic copy.

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	Cerulean Fluorescent Protein (CFP)
Exchanged Cassette Allele Name	Rosa26 ^{CFP.SV40}
Description of Exchange Vector	not available
Exchange Vector Genbank File:	prosa.en.cfp.sv40.neo.gb

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


Associated Images

Image 1	Description: A cyan (Cerulean) fluorescent protein gene was placed under the control of a 4 kb Rosa 26 promoter element and followed by an SV40 polyA site.
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Access Status

 This resource is publicly viewable.

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Primary contributor: [Magnuson Lab](#)
Co-contributed by:
• [BCBC Mouse / ES Cell Core](#)

Resource Tags

embryonic, es, esc, mESC Core, RMCE, Rosa26, Rosa26^{EN.CFP.SV40.Neo}, stem, TL1-Rosa26^{LCA} 5B9

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 Read more about tags

Resource History & Actions

Approved on Nov 25, 2009
Last modified on Mar 07, 2011

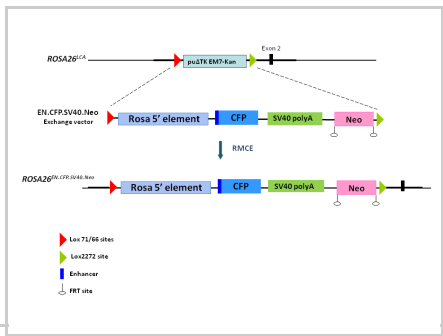
 Login to edit or request an edit

Related resources

BCBC
No matching resources

Other Consortia
No matching resources

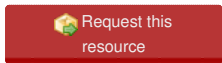
Data courtesy of [dkCOIN](#). Only public resources are displayed.



Reference:
Not provided

Repositories

Magnuson Lab



Stock #: Not provided
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.

