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Rosa26^{EN}-CFP-Neo - ES Cell Line RES2502**ESC Line Information**

Cell Line Name:	Rosa26 ^{EN} -CFP-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.

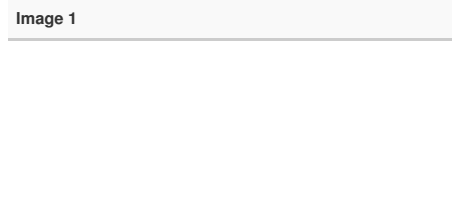
Genetic Alterations**1) RMCE Targeted Mutagenesis**

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	Not provided. (CFP)
Exchanged Cassette Allele Name	Rosa26 ^{EN} .CFP
Description of Exchange Vector	not available
Exchange Vector Genbank File:	prosa.en.cfp.bgsplicepa.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 control of a 4 kb Rosa 26 promoter element. The exchange cassette also has a 51 bp translational

Access Status

 This resource is publicly viewable.

Request this Resource

 Request from a repository

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

Resource Tags


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

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Resource History & Actions

Approved on Nov 24, 2009
Last modified on Mar 07, 2011

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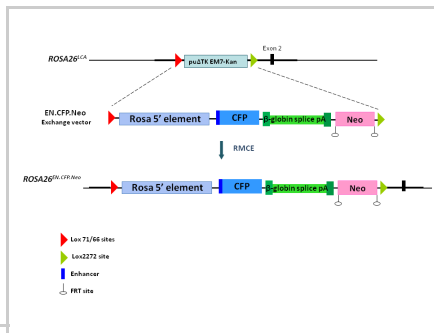
Related resources**BCBC**

No matching resources

Other Consortia

No matching resources

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

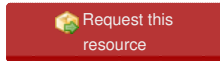


enhancer (5' leader sequence from *Xenopus* beta-globin gene), a Kozak sequence upstream of the start codon, which is followed by intronic region and polyA site from the rabbit beta globin gene.

Reference:
Not provided

Repositories

Magnuson Lab



Stock #: *Not provided*
Availability Notes: *Not provided*

Contact Information

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Associated Publications

No publications associated

Comments

There are no comments for this entry.

