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Rosa26^{EN-GFP-Neo} - ES Cell Line RES2542**ESC Line Information**

Cell Line Name:	Rosa26 ^{EN-GFP-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 eGFP inserted into the Rosa26 gene locus. These cells were used to identify an optimal combination of regulatory elements for fluorescent protein expression from a single genomic copy and can serve as a reference cell line for fluorescent cell sorting.

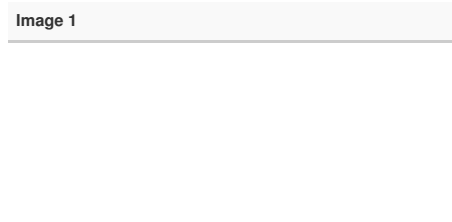
Genetic Alterations**1) RMCE Targeted Mutagenesis**

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	green fluorescent protein (GFP)
Exchanged Cassette Allele Name	Rosa26 ^{EN.GFP}
Description of Exchange Vector	not available
Exchange Vector Genbank File:	prosa.en.gfp.bgssplicepa.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 green fluorescent protein (eGFP) gene was placed under control of the endogenous Rosa 26 promoter. The exchange plasmid also has a 51 bp translational enhancer (5'

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, Rosa26^{EN-GFP-Neo}, stem, TL1, Rosa26^{LCA} clone 5B9

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 Read more about tags

Resource History & Actions

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

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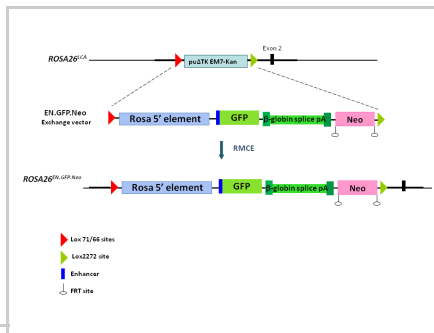
Related resources**BCBC**

No matching resources

Other Consortia

No matching resources

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

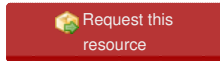


leader sequence from *Xenopus* beta-globin gene), a Kozak sequence upstream of the start codon, and an intronic region and polyA site from the rabbit beta globin gene.

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.

