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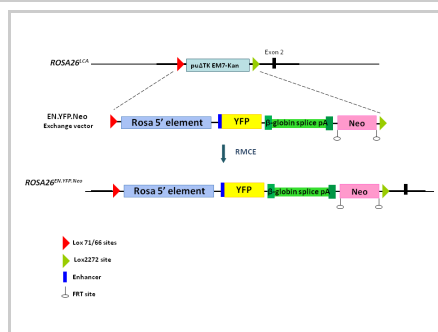
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**Rosa26<sup>EN.YFP.bGspliceA.Neo</sup> - ES Cell Line RES4017****ESC Line Information**

<b>Cell Line Name:</b>	Rosa26 <sup>EN.YFP.bGspliceA.Neo</sup>
<b>Parental Cell Line:</b>	TL-1
<b>Background Strain:</b>	129
<b>Culturing Protocol:</b>	<a href="#">Std_mESC_Culture.doc</a>
<b>Description:</b>	These mESCs contain yellow fluorescent protein (YFP, Citrine) under control of the ROSA26 gene locus. They were made as part of a study to quantify variables that affect fluorescent protein expression levels in mESCs. The YFP sequences are flanked by a translational enhancer and beta-globin splice/polyA sequences. The cassette containing the YFP was inserted into a ROSA26 LCA allele using Recombinase-Mediated Cassette Exchange.


**Genetic Alterations****1) RMCE Targeted Mutagenesis**

<b>Type of Allele</b>	Cassette Acceptor
<b>Targeted Gene</b>	gene trap ROSA 26, Philippe Soriano (Gt(ROSA)26Sor - <a href="#">NCBI GeneID:14910</a> )
<b>Targeted Allele</b>	targeted mutation 1 (Rosa26 <sup>tm1(LCA)</sup> - <a href="#">MGI:104735</a> )
<b>Description of Targeting Vector</b>	Not available
<b>Targeting Vector Genbank File</b>	<a href="#">pRosa26_LCA.gb</a>
<b>Recombinase-Mediated Cassette Exchange Stage</b>	
<b>Type of Allele:</b>	Gene Replacement
<b>Exchanged Cassette Gene</b>	yellow fluorescent protein (YFP)
<b>Exchanged Cassette Allele Name</b>	Rosa26 <sup>YFP</sup>
<b>Description of Exchange Vector</b>	not available
<b>Exchange Vector Genbank File:</b>	<a href="#">pRosa.EN.YFP.bGspliceA.neo.gb</a>
<b>Citations</b>	Not Available


**Associated Images****Image 1****Description:**

A yellow fluorescent protein (YFP, Citrine) gene was placed under control of the endogenous Rosa 26 promoter through the use of an RMCE strategy. The resulting allele contains a 51 bp translational enhancer (5' leader sequence from *Xenopus beta-globin* gene) upstream of the YFP start codon. A portion of the rabbit beta globin gene containing exons 2 and 3 was used to provide 3'UTR of the resulting mRNA. A neomycin resistance cassette is flanked by tandem FRT sites.

**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,  
Rosa26<sup>EN.YFP.bGspliceA.Neo</sup>, stem, TL-1

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**Resource History & Actions**

Approved on Mar 05, 2011

Last modified on Dec 21, 2011

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**Related resources****BCBC**

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**Other Consortia**

No matching resources

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

Reference:  
*Not provided*

## Repositories

Magnuson Lab

*Out of stock*

**Stock #:** *Not provided*

**Availability Notes:** *Not provided*

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## Associated Publications

Publication Citation

[21324933](#) Chen SX, Osipovich AB, Ustione A, Potter LA, Hipkens S, Gangula R, Yuan W, Piston DW, Magnuson MA [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 September 24, 2012)

## Comments

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