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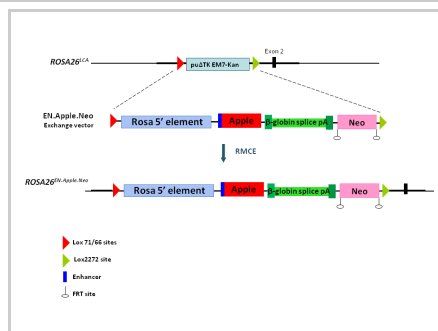
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Rosa26^{Apple.bGspliceA.Neo} - ES Cell Line RES4018**ESC Line Information**

Cell Line Name:	Rosa26 ^{Apple.bGspliceA.Neo}
Parental Cell Line:	TL-1
Background Strain:	129
Culturing Protocol:	Std_mESC_Culture.doc
Description:	To better quantify protein expression levels via confocal microscopy, flow sorting and western blot analysis this cell line contains a 4kb R26 promoter element, Apple (a red fluorescent protein) with an upstream enhancer element, a splicing beta-globin polyA tail and the neomycin gene as a selection agent. Through Recombinase-Mediated Cassette Exchange this construct was inserted into the Rosa26 locus.


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	Not available
Targeting Vector Genbank File	pRosa26.LCA.gb
Recombinase-Mediated Cassette Exchange Stage	
Type of Allele:	Gene Replacement
Exchanged Cassette Gene	Not provided.
Exchanged Cassette Allele Name	Rosa26 ^{EN.Apple.bGspliceA.neo}
Description of Exchange Vector	A 4kb R26 promoter element, Apple (a red fluorescent protein) with an upstream enhancer element, a splicing β-globin polyA tail and the neomycin gene as a selection agent.
Exchange Vector Genbank File:	pRosa.EN.Apple.bGspliceA.neo.gb
Citations	Not Available


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

A red fluorescent protein (RFP, Apple) 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 RFP 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

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^{Apple.bGspliceA.Neo}, 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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No matching resources

Other Consortia

No matching resources

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

by tandem FRT sites.

Reference:
Not provided

Repositories

Magnuson Lab

*Out of stock***Stock #:** *Not provided***Availability Notes:** *Not provided*

Contact Information

Preferred Contact

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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)

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