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**Sox17<sup>GFP</sup>Cre - ES Cell Line RES602****ESC Line Information**

<b>Cell Line Name:</b>	Sox17 <sup>GFP</sup> Cre
<b>Parental Cell Line:</b>	TL-1 / Sox17[LCA] clone 1G3
<b>Background Strain:</b>	129
<b>Culturing Protocol:</b>	<a href="#">Std_mESC_Culture.doc</a>
<b>Description:</b>	Using an RMCE strategy, we inserted a Cre-GFP (Green fluorescent protein) fusion protein into a Sox17[LCA] allele thereby replacing Sox17 coding sequences. The Sox17-CreGFP ESCs may be used to track Sox17-expressing cells and their progeny, or to conditionally inactivate genes in Sox17-expressing cells. Mark the expression of Sox17 with both Cre and GFP. Cre will enable lineage tracing using reporter alleles that are activated by cre recombination. GFP will enable direct visualization of Sox17 gene expression.

**Genetic Alterations**


<b>1) RMCE Targeted Mutagenesis</b>	
<b>Type of Allele</b>	Cassette Acceptor
<b>Targeted Gene</b>	SRY-box containing gene 17 (Sox17 - <a href="#">NCBI GeneID:20671</a> )
<b>Targeted Allele</b>	targeted mutation 1 (Sox17 <sup>tm1(LCA)</sup> - <a href="#">MGI:107543</a> )
<b>Description of Targeting Vector</b>	pSox17.LCA e targeting vector contains 10.288 kb 5' arm and 4.525 kb 3' arm. Lox66 and Lox2272 sites are inserted flanking PuTK selection marker for positive selection for targeting events with puromycin and negative selection for RMCE events with ganciclovir.
<b>Targeting Vector Genbank File</b>	<a href="#">pmSox17.LCA.gb</a>
<b>Recombinase-Mediated Cassette Exchange Stage</b>	
<b>Type of Allele:</b>	Conditional Activating
<b>Exchanged Cassette Gene</b>	green fluorescent protein (Cre-GFP)
<b>Exchanged Cassette Allele Name</b>	Sox17 <sup>Cre-GFP</sup>
<b>Description of Exchange Vector</b>	not available
<b>Exchange Vector Genbank File:</b>	<a href="#">pBSLox-Sox17-CreGFP-Hygro_AG-P.gb</a>
<b>Citations</b>	Not Available

**Associated Images**


Image 1

**Description:**  
Through homologous recombination in ES cells, a 3.793 kb region of the mouse Sox17 gene was replaced by a floxed tk-neo cassette, a puromycin-delta-thymidine kinase fusion gene driven by the mouse phosphoglycerol kinase promoter (pUdeltaTK) and a neomycin resistant gene driven by the bacterial EM7 promoter (EM7neo) flanked by minimal (34 bp) tandemly

**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**

Cre, embryonic, es, esc, GFP, mESC Core, Sox17, Sox17<sup>GFP</sup>Cre, stem, TL1 - Sox17[LCA] 1G3

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**Resource History & Actions**

Approved on Dec 02, 2008  
Last modified on Apr 13, 2015

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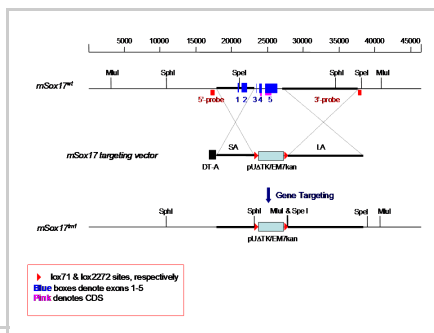
**Related resources****BCBC**

No matching resources

**Other Consortia**

No matching resources

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

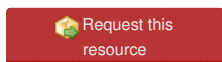


oriented lox71 and lox2272 sites (Cre-recombinase recognition sequences).

**Reference:**  
*Not provided*

## Repositories

Magnuson Lab



**Stock #:** *Not provided*

**Availability Notes:** *Not provided*

## Contact Information

Preferred Contact

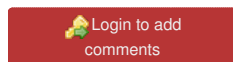
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## Associated Publications

*No publications associated*

## Comments

*There are no comments for this entry.*



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