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Sst.rTTA.LCA - Mouse Strain RES4561**Mouse Information**

Common Name:	Sst.rTTA.LCA
MGI Official Name:	Sst ^{rTTA.LCA.Mgn}
Description:	The Sst.rTTA.LCA mice are designed to express a tet-inducible reverse-transactivator under control of somatostatin promoter. Lox66 and Lox2272 sites are inserted flanking 500bp of Sst promoter region, Sst exons I and II and Sst poly A site. The rTTA-beta-globin poly A cassette is put in place of Sst coding exons (I and II). The mice can be used to drive tet-inducible expression in somatostatin expressing cells (Delta-cells). Additionally, the Lox66 and Lox2272 sites allow for manipulations of the flanked region by RMCE in the future.
Categories:	Cre-lox floxed alleles Tet

Genetic Alterations

1) Targeted Mutagenesis	
Type of Allele	Gene Replacement
Targeted Gene	Somatostatin (Sst - NCBI GeneID:20604)
Targeted Allele	<i>Not provided</i> (Sst ^{rTTA.LCA})
Description of Targeting Vector	The targeting vector contains 7.3 Kb 5' and a 3.6 kb 3' homology arms. Lox66 and Lox2272 sites are inserted flanking 500bp of Sst promoter region and exons I and II of somatostatin gene. rTTA gene with beta-globin polyA site is put in place of Sst exons I and II. The vector also contains FRT-flanked puTK-EM7 Neo selection double selection cassette. PuTK is used for positive selection for targeting events with puromycin and negative selection for RMCE events with ganciclovir. EM7-Neo is used for positive selection in bacteria during BAC recombineering process.
Targeting Vector Genbank File	pSst.rTTA.LCA.gb
Citations	Not Available

Strain Information



Strain Type:	Mixed
Chimera/Founder Genetic Background:	129S6/SvEvTac
Current Genetic Background:	87.5% C57BL/6J and 12.5% 129S6 (date recorded: 06/28/2013)
Strain Description:	Germline male chimeras were mated to C57BL/6J female mice and positive offspring were identified. These offspring were subsequently backcrossed to C57BL/6J animals for a total of three generations.

Associated Images

Image 1

Description:

The Sst.rTTA.LCA was targeted


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](#)
- [Herrera Lab](#)

Resource Tags


mouse, mouse strain, Sst.rTTA.LCA, Sst^{rTTA.LCA.Mgn}

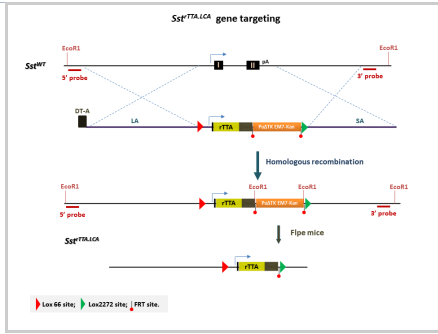
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 [Read more about tags](#)
Resource History & Actions

Approved on Jun 28, 2013

Last modified on Jun 26, 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.

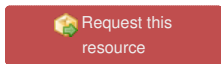


into the Sst^{WT} allele via homologous recombination in mESCs. Resulting targeted clones were injected into wild type mouse blastocysts and germline chimeras were generated. These chimeras were mated to wild type mice and the resulting positive offspring were mated to F1pe transgenic animals in order to remove the PuDeltaTK EM7-Kan region of the original gene target.

Reference:
Not provided

Repositories

Magnuson Lab



Stock #: VUMC, SD BSID 0103
Availability Notes: Sperm cryo

Contact Information

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Associated Publications

No publications associated

Comments

There are no comments for this entry.

