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Nkx2.2^{cCre}-Knock-in - ES Cell Line RES4078**ESC Line Information**

Cell Line Name:	Nkx2.2 ^{cCre} -Knock-in
Parental Cell Line:	TL-1
Background Strain:	129
Culturing Protocol:	<i>Not provided.</i>
Description:	In this ES cell line, the sequence for one of the two bi-partite Cre molecules (cCre) and the IRES sequence were knocked into a site directly upstream of the Nkx2.2 start codon using RMCE in the Nkx2.2 ^{LCA} allele. The presence of the IRES sequence allows for the transcription of cCre and Nkx2.2 from the native Nkx2.2 locus at the same time. This results in the labeling of pancreatic epithelium cells that co-express high levels of Ngn3 and Nkx2.2 during mouse embryonic development.

Genetic Alterations


1) RMCE Targeted Mutagenesis	
Type of Allele	Cassette Acceptor
Targeted Gene	NK2 transcription factor related, locus 2 (Nkx2-2 - NCBI GeneID:18088)
Targeted Allele	targeted mutation 1 (Nkx2.2 ^{m1(LCA)})
Description of Targeting Vector	not available
Targeting Vector Genbank File	pNkx2.2_TV.gb
Recombinase-Mediated Cassette Exchange Stage	
Type of Allele:	Gene Replacement
Exchanged Cassette Gene	Not provided. (Cre)
Exchanged Cassette Allele Name	Nkx2.2 ^{Cre}
Description of Exchange Vector	The pNkx2.2.cCre.KnockIn.HygroD vector was made on a backbone of a basal exchange vector which contains a 5.115 kb sequence from the Nkx2.2 locus, Lox66/Lox2272 sites, and a flrtd (flanked by FRT) Pgk-Hygro cassette that is used for positive selection of ES cells after RMCE. The sequence for one of the two bi-partite Cre molecules (cCre) followed by the IRES sequence were inserted upstream of the Nkx2.2 start codon.
Exchange Vector Genbank File:	pNkx2.2.cCre.KnockIn.HygroD.gb
Citations	Not Available

Associated Images**Image 1**


Description:
Not provided

Reference:
Not provided

Access Status

 This resource is publicly viewable.

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Primary contributor: [Gu Lab](#)

Co-contributed by:

- [BCBC Mouse / ES Cell Core](#)
- [Magnuson Lab](#)

Resource Tags

embryonic, es, esc, Nkx2.2^{cCre}-Knock-in, stem, TL-1


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 Read more about tags

Resource History & Actions

Approved on Dec 21, 2011

Last modified on Apr 22, 2015

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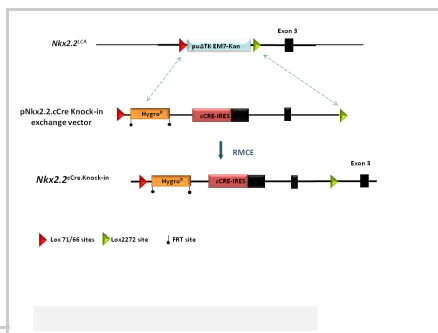
Related resources**BCBC**

No matching resources

Other Consortia

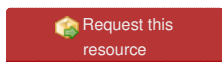
No matching resources

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



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.

