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Nkx6.1^{flox} - Mouse Strain RES1342**Mouse Information**

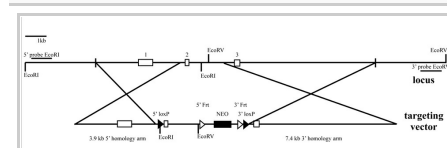
Common Name:	Nkx6.1 ^{flox}
MGI Official Name:	Nkx6-1 ^{tm2(flox)Msan}
Description:	A conditional allele for nkx6.1 is necessary to study the function of Nkx6.1 in adult mice. A homozygous nkx6.1 null allele results in neonatal lethality due to a paralytic state, which is a direct result of Nkx6.1 function in the development of motor neurons. Conditional loss of Nkx6.1 is achieved through Cre mediated recombination of a floxed exon II of nkx6.1. Our use for a conditional nkx6.1 allele is to study its function in beta cells of the adult pancreas.
Categories:	Cre-lox floxed alleles

Genetic Alterations**1) Targeted Mutagenesis**

Type of Allele	Conditional Null
Targeted Gene	Nkx6 Homeobox 1 (Nkx6-1 - NCBI GeneID:18096)
Targeted Allele	targeted mutation 1.1 (Nkx6.1 ^{tm1.1Msan} - MGI:1206039)
Description of Targeting Vector	BAC Recombineering technology was used to introduce loxP sites flanking exon II of Nkx6.1 from an isolated BAC clone. Removal of the floxed region results in the removal of most of the DNA binding homeodomain coding sequence and induces a translational frameshift of exon III. Cre mediated removal of exon II will allow for tissue specific knock-out studies of Nkx6.1.
Targeting Vector Genbank File	Nkx6-1floxPL253.gb
Citations	Not Available

Strain Information


Strain Type:	Congenic Strain
Chimera/Founder Genetic Background:	129S6/SvEvTac
Current Genetic Background:	C57BL/6 (date recorded: 04/23/2015)
Strain Description:	The original chimera has been crossed once to act-Flpe mice that are on the C57/Bl6 strain.

Associated Images**Image 1**

Description:
Not provided


Reference:
Not provided

Repositories**Sander Lab**


 Request this resource

Stock #: Not provided
Availability Notes: Not provided

Access Status

 This resource is publicly viewable.

Request this Resource

 Request from a repository

Primary contributor: [Sander Lab](#)


Co-contributed by:

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

Resource Tags

mESC Core, mouse, mouse strain, Nkx6.1^{flox}, Nkx6-1^{tm2(flox)Msan}

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 Read more about tags

Resource History & Actions

Approved on Mar 26, 2009

Last modified on Mar 24, 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.

Sander Lab

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Associated Publications

No publications associated

Comments

There are no comments for this entry.

