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Nkx2.2:NK2domain mutation - Mouse Strain RES241**Mouse Information**

Common Name:	Nkx2.2:NK2domain mutation
MGI Official Name:	Nkx2-2 ^{tm4Suss}
Description:	The strain carries a mutant Nkx2.2 allele in which conserved residues of the NK2 domain are mutated to alanines.
Categories:	None specified.

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 ^{tm1(LCA)})
Description of Targeting Vector	Through homologous recombination in ES cells, a 5.115 kb region of the Nkx2.2 gene is replaced by a floxed tk-neo cassette, a puromycin-thymidine kinase fusion gene driven by the mouse phosphoglycerol kinase promoter (pUTK) and a neomycin resistant gene driven by the bacterial EM7 promoter (EM7neo) flanked by minimal (34 bp) tandemly oriented lox71 and lox2272 sites (Cre-recombinase recognition sequences).
Targeting Vector Genbank File	pNkx2.2.TV.gb
Recombinase-Mediated Cassette Exchange Stage	
Type of Allele:	<i>Not available</i>
Exchanged Cassette Gene	Not provided.
Exchanged Cassette Allele Name	Nkx2.2-NK2 mutation
Description of Exchange Vector	Nkx2.2:NK2domain mutation
Exchange Vector Genbank File:	Not Available
Citations	Not Available

Strain Information


Strain Type:	Mixed
Chimera/Founder Genetic Background:	129S6/SvEvTac
Current Genetic Background:	Not provided (date recorded: Not provided)
Strain Description:	The strain was created on a 129 background. Once the strain is transferred to the Sussel lab, it will be maintained on a Swiss Black background.

Associated Images


Image 1

Description:
Conserved amino acid sequence in the NK2 domain of all mouse Nkx2 family

Access Status

 This resource is publicly viewable.

Request this Resource

 Request from a repository

Primary contributor: [Sussel Lab](#)
Co-contributed by:
• [BCBC Mouse / ES Cell Core](#)

Resource Tags

mESC Core, mouse, mouse strain, Nkx2.2, Nkx2.2:NK2domain mutation, Nkx2-2^{tm4Suss}, RMCE

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Resource History & Actions

Approved on Aug 08, 2008
Last modified on Apr 15, 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.

Top:sequences: conserved NK2 domain
Bottom sequence: mutated NK2 domain

```

H.mus Rkx2.2  EFHWVYFVLEVREGDFQALRAGD
H.mus Rkx2.1  EFHWVYFVLEVREGDFQALRAGD
H.mus Rkx2.3  EFHWVYFVLEVREGDFQALRAGD
H.mus Rkx2.4  EFHWVYFVLEVREGDFQALRAGD
H.mus Rkx2.5  EFHWVYFVLEVREGDFQALRAGD
NKx2.2NK2-50WT  APAAAAAPAAAAAGAPMALKRAGD


```

members and alanine substitutions present in the mutant allele.

Reference:
Not provided

Repositories

Sussel Lab

 Request this resource

Stock #: VUMC-KJ
Availability Notes: *Not provided*

Contact Information

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Associated Publications

No publications associated

Comments

There are no comments for this entry.

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