

My Account

Login
Create Account

Resources

View All (813)
Adenoviruses (137)
Antibodies (175)
Bioimages (67)
Genomics Studies (145)
mESC Lines (68)
Mouse Strains (120)
Miscellaneous (46)
Protocols (55)
Research Data (4)
Resource Tags (389)
Visualization (9)

Research & Cores

Core Facilities (5)
Research Highlights (5)
Research Networks
Research Objectives

Information

About the BCBC
BCBC Events
Branding & Logos
Career Opportunities
Health
NIH hESC Registry
Policies & Guidelines
Member Publications
Research Programs
Research Investigators
Member Directory
Tutorials

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

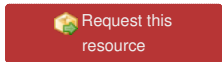
H.mus Nkx2-2	EFREVVVFLVREGDFQALRAGD
H.mus Nkx2-1	EFREVVVFLVREGDFQALRAGP
H.mus Nkx2-3	PFREVVVFLVREGDFQYRAGP
H.mus Nkx2-4	EFREVVVFLVREGDFQDQAGDP
H.mus Nkx2-5	FAREVVVFLVREGDFQDQAGDP
Nkx2-2NK2-3DPTT	APAAAAAPAAAAGAPMALKAGD

members and alanine substitutions present in the mutant allele.

Reference:
Not provided

Repositories

Sussel Lab



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.

