ESC Line Information

Cell Line Name: Nkx2.2Cre.EGFP
Parental Cell Line: TL-1
Background Strain: 129
Culturing Protocol: Not provided.
Description: In this ES cell line, a coding portion of the transcription factor Nkx2.2 was replaced with a Cre-EGFP cassette, in frame to the Nkx2.2 ATG. This allows for sites of Nkx2.2 gene expression to be identified in mice using direct immunofluorescence, FACS purification of Nkx2.2 expressing cells, and lineage tracing using Nkx2.2 driven Cre expression.

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 (Nkx2.2tm1(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-eGFP)
Exchanged Cassette Allele Name: Nkx2.2Cre.EGFP
Description of Exchange Vector: The Nkx2.2Cre.EGFP.HygroD vector was made on a backbone of a basal exchange vector which contains a 5,115 kb sequence from the Nkx2.2 locus, Lox71,Lox2272 sites, and a fitted (flanked by FRT) Pgk-Hygro cassette that is used for positive selection of ES cells after RMCE. 1,956 kb of the native Nkx2.2 gene sequence, containing a portion of exon 1 (all but the first 214 bp) and all of exon 2, was replaced with a Cre-EGFP fusion coding sequence after the Nkx2.2 ATG translation initiation site.
Exchange Vector Genbank File: Nkx2.2Cre.EGFP.HygroD.gb

Citations
Not Available

Associated Images

Image 1
Description: Not provided
Reference: Not provided
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.

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