ESC Line Information

- **Cell Line Name:** Nkx2.2Cherry
- **Parental Cell Line:** TL-1
- **Background Strain:** 129
- **Culturing Protocol:** Not provided
- **Description:** In this ES cell, 1.956 kb of the native Nkx2.2 gene, containing a portion of exon 1 (all but the first 214 bp) and all of exon 2, was replaced by the mCherry cassette in frame to the Nkx2.2 ATG. This allows for sites of Nkx2.2 gene expression in the mouse to be identified using direct immunofluorescence and FACS purification of Nkx2.2 expressing cells.

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.
- **Exchanged Cassette Allele Name:** Cherry
- **Description of Exchange Vector:** The Nkx2.2Cherry.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 flrted (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 mCherry cassette immediately following the Nkx2.2 ATG translation initiation site.

**Exchange Vector Genbank File:** Not Available

Citations

- **Not Available**
Repositories
Magnuson Lab

Stock #: Not provided
Availability Notes: Not provided

Contact Information
Preferred Contact
Name: Lori Sussel
Institution: Columbia University
Phone: 212-851-5115
Email: lsg2@columbia.edu

Associated Publications
No publications associated

Comments
There are no comments for this entry.