

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

Rosa26^{Neprn.Cherry} - ES Cell Line RES4016**ESC Line Information**

Cell Line Name:	Rosa26 ^{Neprn.Cherry}
Parental Cell Line:	TL-1
Background Strain:	129
Culturing Protocol:	Std_mESC_Culture.doc
Description:	This ES cell line was generated by RMCE using the Rosa26.LCA allele. To create a Neprn reporter allele, a 9kb promoter region of the Neprn gene is inserted upstream of the red fluorescent protein mCherry-pA sequence. Since Neprn is expressed during endoderm development, this cell line can be used for visualisation and sorting of endodermal cell populations.

Genetic Alterations

1) RMCE Targeted Mutagenesis	
Type of Allele	Cassette Acceptor
Targeted Gene	gene trap ROSA 26, Philippe Soriano (Gt(ROSA)26Sor - NCBI GeneID:14910)
Targeted Allele	targeted mutation 1 (Rosa26 ^{tm1(LCA)} - MGI:104735)
Description of Targeting Vector	Not available
Targeting Vector Genbank File	pRosa26.LCA.gb
Recombinase-Mediated Cassette Exchange Stage	
Type of Allele:	Gene Replacement
Exchanged Cassette Gene	nephrocan (MGI:66650)
Exchanged Cassette Allele Name	Neprn-Cherry
Description of Exchange Vector	The pBS.Lox.Neprn.Cherry.HA1-HA2-2 exchange vector was made on a backbone of a basal exchange vector which contains Lox66/Lox2272 sites. BAC recombineering was used to retrieve 9.368 kp of 5' Neprn sequence upstream of mCherry-beta globin polyA followed by 833 bp of 3' Neprn sequences. A flrtd (flanked by FRT)Pgk-Neo cassette for positive selection of ES cells after RMCE was cloned downstream.
Exchange Vector Genbank File:	pBS.Lox.Neprn.Cherry.HA1HA222.gb
Citations	Not Available

Associated Images

Image 1

Description:

These mESCs contain a single copy transgene, consisting of a red fluorescent protein (RFP, mCherry) gene under control of a 10 kb fragment of the mouse Neprn gene, inserted into a ROSA26^{LCA} allele by RMCE. The 3' UTR was from the rabbit beta-globin gene. The neomycin resistance cassette is flanked

Access Status

 This resource is publicly viewable.

Request this Resource

 Request from a repository

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

Resource Tags

embryonic, es, esc, Rosa26^{Neprn.Cherry}, stem, TL-1

 Login to edit tags

 Read more about tags

Resource History & Actions

Approved on Dec 07, 2011
Last modified on Dec 07, 2011

 Login to edit or request an edit

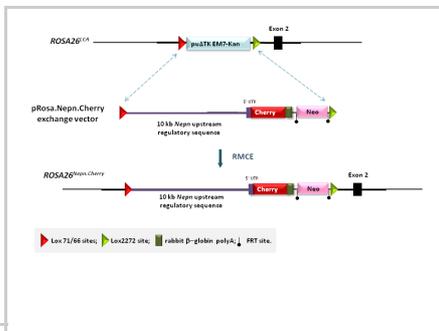
Related resources**BCBC**

No matching resources

Other Consortia

No matching resources

Data courtesy of [dkCOIN](#). Only public resources are displayed.



by tandem FRT sites.

Reference:
Not provided

Repositories

Magnuson Lab

Out of stock

Stock #: Not provided

Availability Notes: Not provided

Contact Information

Preferred Contact

Name	Mark Magnuson
Institution	Vanderbilt University
Phone	615-322-7006
Email	mark.magnuson@vanderbilt.edu

Associated Publications

No publications associated

Comments

There are no comments for this entry.

Login to add comments

