

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

TetO-CyclinD1-T286A/Cherry - Mouse Strain RES1221**Mouse Information**

Common Name:	TetO-CyclinD1-T286A/Cherry
MGI Official Name:	Gt(ROSA)26Sor ^{tm1(Ccnd1T286A)Stang}
Description:	This strain expresses both mutant cyclin D1 ^{T286A} and a cherry reporter under the regulation of a tetracycline-responsive bi-directional minimal CMV promoter (TRE-Tight; tetO). The cyclin D1-T286A mutant cannot be phosphorylated by GSK-3beta and is resistant to polyubiquitination. Therefore, cyclin D1-T286A remains nuclear throughout the cell cycle and has an extended half-life relative to wild-type cyclin D1. This strain represents an effective tool for generating inducible tissue-specific cyclin D1 ^{T286A} mutants with a cherry reporter.
Categories:	Tet

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:	Conditional Activating
Exchanged Cassette Gene	Cyclin D1 (cyclin D1-T286A - NCBI GeneID:12443)
Exchanged Cassette Allele Name	Rosa26 ^(Ccnd1T286A)
Description of Exchange Vector	Flag-cyclinD1T286A was PCR amplified from plasmid (Diehl JA, et al., Genes Dev 1997;11:957 - 972). MluI restriction sites were added to 5' and 3' ends and a Kozak consensus sequence was added. PCR product was cloned into MluI sites of pBR322.hygro.ptight.cherry, screened for orientation, and sequence confirmed bi-directionally.
Exchange Vector Genbank File:	pBR322.hygro.ptight.cherry.CyclinD1T286A.gb
Citations	Not Available


Strain Information

Strain Type:	Mixed
Chimera/Founder Genetic Background:	129S6/SvEvTac
Current Genetic Background:	C57BL/6J (date recorded: Not provided)
Strain Description:	Not provided


Associated Images

No associated images have been supplied

Repositories**Access Status**

 This resource is publicly viewable.

Request this Resource

 Request from a repository

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

Resource Tags


mouse, mouse strain, TetO-CyclinD1-T286A/Cherry

 Login to edit tags

 Read more about tags

Resource History & Actions

Approved on Mar 10, 2009
Last modified on Jan 14, 2011

 Login to edit or request an edit

Related resources**BCBC**

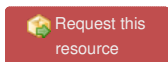
No matching resources

Other Consortia

No matching resources

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

Magnuson Lab



Stock #: LM BSID 0076
Availability Notes: Sperm cryo vial LM, Straw LM, BSID 0076, 47 straws, frozen 10/11/10

Contact Information

Preferred Contact

Name	Ben Stanger
Institution	University of Pennsylvania
Phone	215-746-5560
Email	bstanger@exchange.upenn.edu

Primary Lab Contact

Name	Matthew Emmett
Institution	University of Pennsylvania
Phone	<i>Not provided</i>
Email	memmett@mail.med.upenn.edu

Associated Publications

No publications associated

Comments

There are no comments for this entry.

