

## B6.Cg-Tg(Prrx1-cre/ERT2,-EGFP)1Smkm/J

Stock No: 029211 | Prx1CreER-GFP

 Congenic, Transgenic

Live mice available in varying quantities. Ask Customer Service for details.

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for generating osteochondro progenitor cell specific targeted mutants for studies of cartilage and bone development, lineage fate mapping, and isolation of transgene expressing periosteal cells.

### Donating Investigator

Guang Zhou, Case Western University

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## GENETIC OVERVIEW

### Genetic Background

### Generation

N8+pN1F11  
(2021-04-01 00:00:00)

## Tg(Prrx1-cre/ERT2,-EGFP)1Smkm

### Alele Type

Transgenic (Recombinase-expressing, Reporter, Inducible)

VIEW GENETICS

## RESEARCH APPLICATIONS

Developmental Biology Research

Research Tools

VIEW ALL RESEARCH APPLICATIONS

## BASE PRICE

Starting at:

\$270.00 Domestic price for female 4-week

V I E W P R I C E L I S T

### Details

#### Detailed Description

These transgenic mice express tamoxifen-inducible Cre recombinase, cre/ERT2, and enhanced green fluorescent protein (EGFP) under the control of the 2.4 kb mouse *Prrx1*, paired related homeobox 1, gene promoter. Transgene expression is detected in developing limbs by fluorescence, as early as E10.5, and in craniofacial areas and limbs by E17.5. Tamoxifen treatment of pregnant females when embryos are E9.0 results in recombination at E17.0 in chondrocytes and osteoblasts in the developing limb. Tamoxifen treatment of transgenic mice, postnatal day 19, results in recombination in the perichondrium and periosteum. Mice that are homozygous for the transgene are viable and fertile. The Donating Investigator reports there is no difference between the phenotype exhibited by homozygotes compared to hemizygotes. During backcrossing, the Y chromosome may not have been fixed to the C57BL/6 genetic background.

*The Cre-ERT2 fusion protein consists of Cre recombinase fused to a triple mutant form of the human estrogen receptor which does not bind its natural ligand (17 $\beta$ -estradiol) at physiological concentrations but will bind the synthetic estrogen receptor ligands 4-hydroxytamoxifen (OHT or tamoxifen) and, with lesser sensitivity, ICI 182780. Restricted to the cytoplasm, Cre-ERT2 can only gain access to the nuclear compartment after exposure to tamoxifen. To counteract the mixed estrogen agonist effects of tamoxifen injections, which can result in late fetal abortions in pregnant mice, progesterone may be coadministered.*

#### Development

#### Expression Data

#### Control Suggestions

#### Selected References

### Genetics

#### Tg(Prrx1-cre/ERT2,-EGFP)1Smkm

## – Disease/Phenotype

+ [Disease Terms](#)

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+ [Research Areas By Phenotype](#)

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+ [Mammalian Phenotype Terms by Genotype](#)

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+ [References](#)

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## – Technical Support

C O N T A C T   T E C H N I C A L   S U P P O R T

### Genotyping Protocols

Standard PCR: [Tg\(Prrx1-cre\) Alternate 1](#)  
QPCR: [Tg\(Prrx1-cre/ERT2,-EGFP\)1Smkm QPCR](#)  
Standard PCR: [Generic Cre/ERT2 alternate1](#)  
[Genotyping resources and troubleshooting](#)

### Breeding Considerations

When maintaining a live colony, these mice can be bred as hemizygotes or homozygotes.

[Additional Breeding and Husbandry Support](#)

### Mating System

Homozygote x Homozygote

### Citation

When using the Prx1CreER-GFP mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #029211 in your Materials and Methods section.

### Animal Health Reports

[Facility Barrier Level Descriptions](#)

 [AX12 \(Maximum\)](#)

## – Pricing & Availability



Live mice available in varying quantities. Ask Customer Service for details.

Available

## Domestic International

Pricing effective for USA, Canada and Mexico shipping destinations

LIVE MOUSE			
AGE	SEX	GENOTYPE	PRICE
4 weeks	Female	Homozygous for Tg(Prrx1-cre/ERT2-EGFP)1Smkm	\$270.00
	Male	Homozygous for Tg(Prrx1-cre/ERT2-EGFP)1Smkm	\$270.00
5 weeks	Female	Homozygous for Tg(Prrx1-cre/ERT2-EGFP)1Smkm	\$270.00
	Male	Homozygous for Tg(Prrx1-cre/ERT2-EGFP)1Smkm	\$270.00
6 weeks	Female	Homozygous for Tg(Prrx1-cre/ERT2-EGFP)1Smkm	\$270.00
	Male	Homozygous for Tg(Prrx1-cre/ERT2-EGFP)1Smkm	\$270.00
7 weeks	Female	Homozygous for Tg(Prrx1-cre/ERT2-EGFP)1Smkm	\$270.00
	Male	Homozygous for Tg(Prrx1-cre/ERT2-EGFP)1Smkm	\$270.00
8 weeks	Female	Homozygous for Tg(Prrx1-cre/ERT2-EGFP)1Smkm	\$270.00
	Male	Homozygous for Tg(Prrx1-cre/ERT2-EGFP)1Smkm	\$270.00
9 weeks	Female	Homozygous for Tg(Prrx1-cre/ERT2-EGFP)1Smkm	\$270.00
	Male	Homozygous for Tg(Prrx1-cre/ERT2-EGFP)1Smkm	\$270.00
10 weeks	Female	Homozygous for Tg(Prrx1-cre/ERT2-EGFP)1Smkm	\$270.00
	Male	Homozygous for Tg(Prrx1-cre/ERT2-EGFP)1Smkm	\$270.00
11 weeks	Female	Homozygous for Tg(Prrx1-cre/ERT2-EGFP)1Smkm	\$270.00
	Male	Homozygous for Tg(Prrx1-cre/ERT2-EGFP)1Smkm	\$270.00
12 weeks	Female	Homozygous for Tg(Prrx1-cre/ERT2-EGFP)1Smkm	\$270.00
	Male	Homozygous for Tg(Prrx1-cre/ERT2-EGFP)1Smkm	\$270.00

## RELATED PRODUCTS AND SERVICES

Frozen Mouse Embryo	B6.Cg-Tg(Prrx1-cre/ERT2-EGFP)1Smkm/J Frozen Embryo	\$2595.00
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By Gene

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