

**B6.Cg-Gt(ROSA)26Sor<sup>tm1.2(CAG-tdTomato,-EGFP)Pjen</sup> /J**Stock No: **026931** | RC::RLTG Congenic, Targeted Mutation

Typically mice are recovered in 10-14 weeks. Contact Customer Service to place an order or for more information.

[PLACE ORDER](#)[Email](#) [Download PDF](#) [Help](#)

all preventing transcription of eGFP. Dre recombinase results in high tdTomato fluorescence, and further exposure to Cre recombinase results in robust eGFP fluorescence. The RC::RLTG allele and its derivatives are useful for fluorescent labeling of cells/tissues in embryonic or adult mice. These mice allow intersectional genetic fate mapping of different cell subpopulations defined by the overlap of two gene expression domains.

### Donating Investigator

Patricia Jensen, National Institute of Environmental Health Sciences (NIEHS)

[READ MORE +](#)

## GENETIC OVERVIEW

**Genetic Background****Generation***Gt(ROSA)26Sor<sup>tm1.2(CAG-tdTomato,-EGFP)Pjen</sup>***Alele Type**Targeted (Conditional ready  
(e.g. floxed), Reporter)**Gene Symbol***Gt(ROSA)26Sor***Gene Name**

gene trap ROSA 26, Philippe Soriano

[VIEW GENETICS](#)

## RESEARCH APPLICATIONS

Research Tools

Neurobiology Research

Cancer Research

[VIEW ALL RESEARCH APPLICATIONS](#)

## BASE PRICE

Starting at:

\$2,854.50 Domestic price Cryo Recovery

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

### Details

#### Detailed Description

The RC::RLTG dual-recombinase responsive indicator allele has a *rox*-flanked STOP and *loxP*-flanked tdTomato::STOP preventing transcription of eGFP. Although under control of the endogenous *Gt(ROSA)26Sor* promoter/enhancer regions and the CAG hybrid promoter, widespread expression of either fluorescent protein is prevented by STOP cassettes. After removal of the first STOP cassettes by Dre recombination, robust tdTomato fluorescence is expected in *dre*-expressing cells/tissues. Further exposure to Cre recombinase removes the floxed-tdTomato::STOP, resulting in robust eGFP fluorescence.

Specifically, the donating investigator reports that RC::RLTG mice have no tdTomato expression prior to introduction of Dre recombinase, and no significant eGFP expression prior to introduction of Dre and Cre recombinases. Although a low level of eGFP expression is consistently present in some cell types prior to *cre* expression, removal of the floxed-tdTomato::STOP results in significantly greater levels of eGFP expression. The donating investigator reports that the premature eGFP fluorescence is barely visible when imaged using parameters calculated for recombinase-expressing cells.

Because both fluorescent proteins can fill the axons of neurons, the simultaneous tracing of projections from two different neuronal subpopulations is possible.

Mice homozygous for the RC::RLTG allele are viable and fertile with no reported gross physical or behavioral abnormalities.

*dre*- and/or *cre*-mediated removal of specific STOP cassettes within the RC::RLTG allele results in the following derivative alleles:

- i. The single-recombinase responsive indicator allele RC::LTG has constitutive tdTomato fluorescence and allows *cre*-inducible eGFP fluorescence.
- ii. The single-recombinase responsive indicator allele RC::RG has no tdTomato expression (tdTomato::STOP sequences removed) and allows *dre*-inducible eGFP fluorescence.

---

#### + Development

---

#### + Expression Data

---

#### + Control Suggestions

---

[+ Selected References](#)

---

## [- Genetics](#)

---

[+ \*Gt\(ROSA\)26Sor<sup>tm1.2\(CAG-tdTomato,-EGFP\)Pjen</sup>\*](#)

---

## [- Disease/Phenotype](#)

[+ Disease Terms](#)

---

[+ Research Areas By Phenotype](#)

---

[+ Mammalian Phenotype Terms by Genotype](#)

---

[+ References](#)

---

## [- 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: [Gt\(ROSA\)26Sor](#)

[Genotyping resources and troubleshooting](#)

### Breeding Considerations

When maintaining a live colony, homozygous mice may be bred together.

[Additional Breeding and Husbandry Support](#)

### Citation

When using the RC::RLTG mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #026931 in your Materials and Methods section.

### Animal Health Reports

[Facility Barrier Level Descriptions](#)

Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, [G200](#)

## 🔍 Pricing & Availability



Cryo  
Recovery

Typically mice are recovered in 10-14 weeks. Contact Customer Service to place an order or for more information.

## Domestic | International

Pricing effective for USA, Canada and Mexico shipping destinations

### CRYORECOVERY - DOMESTIC PRICING

SERVICE/PRODUCT	DESCRIPTION	PRICE
<a href="#">Cryo Recovery</a>	Heterozygous or wildtype for Gt(ROSA)26Sor<tm1.2(CAG-tdTomato,-EGFP)Pjen>	\$2,854.50

### RELATED PRODUCTS AND SERVICES

<a href="#">Frozen Mouse Embryo</a>	B6.Cg-Gt(ROSA)26Sor<tm1.2(CAG-tdTomato,-EGFP) Frozen Embryos	\$2595.00
-------------------------------------	--	-----------

## PAYMENT TERMS AND CONDITIONS

Terms are granted by individual review and stated on the customer invoice(s) and account statement. These transactions are payable in U.S. currency within the granted terms. Payment for services, products, shipping containers, and shipping costs that are rendered are expected within the payment terms indicated on the invoice or stated by contract. Invoices and account balances in arrears of stated terms may result in The Jackson Laboratory pursuing collection activities including but not limited to outside agencies and court filings.

## THE JACKSON LABORATORY'S GENOTYPE PROMISE

The Jackson Laboratory has rigorous genetic quality control and mutant gene genotyping programs to ensure the genetic background of JAX® Mice strains as well as the genotypes of strains with identified molecular mutations. JAX® Mice strains are only made available to researchers after meeting our standards. However, the phenotype of each strain may not be fully characterized and/or captured in the strain data sheets. **Therefore, we cannot guarantee a strain's phenotype will meet all expectations.** To ensure that JAX® Mice will meet the needs of individual research projects or when requesting a strain that is new to your research, we suggest ordering and performing tests on a small number of mice to determine suitability for your particular project. We do not guarantee [breeding performance](#) and therefore suggest that investigators order more than one breeding pair to avoid delays in their research.

## 🔍 Terms Of Use

# TERMS OF USE

[General Terms and Conditions](#)

Q U E S T I O N S   A B O U T   T E R M S   O F   U S E

## ADDITIONAL USE RESTRICTIONS APPLY

Use of MICE by companies or for-profit entities requires a license prior to shipping.

## LICENSING INFORMATION

Phone: 207-288-6470

Email: [TechTran@jax.org](mailto:TechTran@jax.org)

### Related Strains

All

By Allele

By Gene

By Collection







## DO YOU NEED BALB/c MICE?

Rely on JAX to provide the models you need, when you need them.

[LEARN MORE](#)



 CONTACT

 DONATE

 SUBSCRIBE

[JAX HOME](#) [CAREERS](#) [LEGAL INFORMATION](#)

[RESEARCH CENTERS](#) [MOUSE GENOME INFORMATICS](#)


[MOUSE PHENOME DATABASE](#)

*Leading the search for*

# TOMORROW'S CURES



©2021 THE JACKSON LABORATORY

Choose other country or region 

[^](#) [E](#) [E](#) [E](#) [D](#) [B](#)

Did you find what you were looking for?

Yes  No