# D2.Cg-Tg(Thy1-Brainbow1.0)LLich/SjJ

Stock No: **026854**

Congenic, Transgenic

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

PLACE ORDER



studies.

## Donating Investigator

Dr. Simon John, The Jackson Laboratory

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## GENETIC OVERVIEW

**Genetic Background** **Generation**

### Tg(Thy1-Brainbow1.0)LLich

**Allele Type**

Transgenic (Reporter)

VIEW GENETICS

## RESEARCH APPLICATIONS

Research Tools
Neurobiology Research

VIEW ALL RESEARCH APPLICATIO

BASE PRICE

Starting at:

$2,854.50 Domestic price Cryo Recovery

VIEW PRICE LIST

## Details

### Detailed Description

These Thy1-Brainbow 1.0 (line L) transgenic mice are viable and fertile. The mice possess multiple fluorescent protein sequences uniquely flanked with pairs of incompatible *Lox* sites alternated to create mutually exclusive recombination events; allowing stochastic expression of multiple fluorescent proteins from a single transgene. Prior to Cre-mediated recombination, the fluorescent protein immediately adjacent to the promoter, dTomato (RFP), is expressed in peripheral and central neurons. When bred to Cre recombinase expressing mice, the resulting offspring can have one of three expression outcomes for each transgene in each cell of the *cre* expressing tissue(s): dTomato (RFP) (no recombination), mCerulean (CFP), or mYFP. Integration of tandem transgene copies yields combinatorial fluorescent protein expression in each cell, and thus many possible cell colors, providing a way to distinguish adjacent neurons and visualize other cellular interactions. Of note, the single *FRT* site inserted in the transgene allows tandem transgene copy number reduction through *Flp*-mediated recombination if desired. These Brainbow 1.0 (founder line L) mice were found to have multiple transgene copies that allow labeling of individual neuronal types (specifically hippocampal neuron cell bodies, and including motor neurons, dentate gyrus granule cells, pyramidal neurons of the cortex and CA1 area) with approximately 166 distinguishable color variations in *cre* recombined cells, and may also be useful in conjunction with other Brainbow strains (Stock No. 007901, Stock No. 007911, Stock No. 007921) for neurobiological studies.

View Brainbow images for Stock No's 007901, 007910, 007911, and 007921.

*In an attempt to offer alleles on well-characterized or multiple genetic backgrounds, alleles are frequently moved to a genetic background different from that on which an allele was first characterized. It should be noted that the phenotype could vary from that originally described. We will modify the strain description if necessary as published results become available.*

### Development

### Expression Data

### Control Suggestions

### Selected References

## Genetics

### Tg(Thy1-Brainbow1.0)LLich

## Disease/Phenotype

### Disease Terms

### Research Areas By Phenotype

### Mammalian Phenotype Terms by Genotype

### References

## Technical Support

CONTACT TECHNICAL SUPPORT

### Genotyping Protocols

Standard PCR:Tg(Thy1-Brainbow1.0)LLich
Genotyping resources and troubleshooting

### Breeding Considerations

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

Additional Breeding and Husbandry Support

### Mating System

Homozygote x Homozygote

### Citation

When using the D2.Cg-Tg(Thy1-Brainbow1.0)LLich/SjJ mouse strain in a publication, please cite the originating article(s) and include JAX stock #026854 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 |
|---|---|---|
| Cryo Recovery | Hemizygous or non carrier for Tg(Thy1-Brainbow1.0)LLich | $2,854.50 |

RELATED PRODUCTS AND SERVICES

| | | |
|---|---|---|
| Frozen Mouse Embryo | D2.Cg-Tg(Thy1-Brainbow1.0)LLich/SjJ | $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

QUESTIONS ABOUT TERMS OF USE

## 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

## Related Strains

All

By Allele

By Gene

By Collection

*Leading the search for*

# TOMORROW'S CURES



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