

## B6;C3-Tg(PDGFB-LRRK2\*R1441C)574Djmo/J

Stock No: 016576

 Transgenic

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](#)

repeat kinase 2 (*LRRK2\*R1441C*) cDNA. These mice may be useful for studying Parkinson's disease pathogenesis and neurodegeneration elicited by the dominant toxic effects of mutant *LRRK2\*R1441G* expression.

### Donating Investigator

Darren J Moore, Van Andel Research Institute

Valina Dawson, The Johns Hopkins University

READ MORE +

## GENETIC OVERVIEW

Genetic Background

Generation

### Tg(PDGFB-LRRK2\*R1441C)574Djmo

#### Alele Type

Transgenic (Inserted expressed sequence, Humanized sequence)

VIEW GENETICS

## RESEARCH APPLICATIONS

Neurobiology 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

*R1441C-LRRK2* transgenic mice have a minimal cytomegalovirus (CMV) enhancer and human platelet derived growth factor, B polypeptide (*PDGFB*) promoter/enhancer elements driving expression of a mutated full length human leucine-rich repeat kinase 2 (*LRRK2*\**R1441C*) cDNA. Hemizygotes are viable, fertile, and normal in size. The *LRRK2* cDNA was modified to harbor the *LRRK2*\**R1441C* mutation associated with autosomal dominant, late-onset Parkinson's disease originally identified in family D from Western Nebraska. *LRRK2* protein, also known as Dardarin, contains multiple functional domains and may play a role in regulating *alpha-synuclein*-mediated neuropathology through modulating the intracellular trafficking and accumulation of SNCA protein. *R1441C-LRRK2* is selectively overexpressed in the cerebral cortex and cerebellum. These mice display reduced levels of cortical catecholamines, a progressive impairment of locomotor activity and the accumulation of autophagic vacuoles in the cerebral cortex. These mice may be useful for studying Parkinson's disease pathogenesis and neurodegeneration elicited by the dominant toxic effects of mutant *LRRK2*\**R1441C* expression.

#### Development

#### Expression Data

#### Control Suggestions

#### Selected References

### Genetics

#### Tg(PDGFB-LRRK2\*R1441C)574Djmo

### 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:[Tg\(PDGFB-LRRK2\)](#)

Standard PCR:[Tg\(PDGFB-LRRK2\)](#)

[Genotyping resources and troubleshooting](#)

### Breeding Considerations

When maintaining a live colony, hemizygous mice may be bred to wildtype (noncarrier) mice from the colony.

[Additional Breeding and Husbandry Support](#)

### Citation

When using the B6;C3-Tg(PDGFB-LRRK2\*R1441C)574Djmo/J mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #016576 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>	Hemizygous or Non carrier for Tg(PDGFB-LRRK2*R1441C)574Djmo	\$2,854.50

RELATED PRODUCTS AND SERVICES		
<a href="#">Frozen Mouse Embryo</a>	B6;C3-Tg(PDGFB-LRRK2*R1441C)574Djmo/J Frozen Embryo	\$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