The Jackson Laboratory

B6.129P2-*Pdha1* ^{tm1Ptl} /J

Stock No: **017443**

Congenic, Targeted Mutation

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

PLACE ORDER

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Donating Investigator

Mulchand S Patel, SUNY at Buffalo

READ MORE +

GENETIC OVERVIEW

Genetic Background	Generation

Pdha1^{tm1Ptl}

Allele Type	Gene Symbol	Gene Name
Targeted (Conditional ready (e.g. floxed), No functional change)	*Pdha1*	pyruvate dehydrogenase E1 alpha 1

VIEW GENETICS

RESEARCH APPLICATIONS

Metabolism Research
Diabetes and Obesity Research
Research Tools
Internal/Organ Research

VIEW ALL RESEARCH APPLICATION

BASE PRICE

Starting at:

$2,854.50 Domestic price Cryo Recovery

VIEW PRICE LIST

Details

Detailed Description

These *Pdha1*^{flox8} mutant mice possess *loxP* sites flanking exon 8 of the pyruvate dehydrogenase E1 alpha 1 (*Pdha1*) gene. Mice that are homozygous for this allele are viable, fertile, normal in size and do not display any gross physical or behavioral abnormalities. PDHA1 is catalytic component of the pyruvate dehydrogenase complex (PDC) which is a mitochondrial multienzyme complex involved in lipid synthesis, glucose homeostasis, and metabolism of carbohydrates. When these mutant mice are bred to mice that express Cre recombinase, resulting offspring will have exon 8 deleted in *cre*-expressing tissues. For example, when crossed to a strain expressing Cre recombinase in the liver, this mutant mouse strain may be useful for studying lipid metabolism, glucose metabolism, and insulin sensitivity in the liver.

When bred to a strain expressing Cre recombinase in the central and periphal nervous system (see Stock No. 003771 for example), this mutant mouse strain may be useful in studies of neuronal migration, axonal growth and cell-cell interactions.

When bred to a strain expressing Cre recombinase in the oocyte (see Stock No. 003651 for example), this mutant mouse strain may be useful in studies of oogenesis.

When bred to a strain expressing Cre recombinase in skeletal and cardiac muscle (see Stock No. 006475 for example), this mutant mouse strain may be useful in studies of cardiac glucose metabolism.

Development

Control Suggestions

Selected References

Genetics

Pdha1^{tm1Ptl}

Disease/Phenotype

- Disease Terms
- Research Areas By Phenotype
- Mammalian Phenotype Terms by Genotype
- References

Technical Support

CONTACT TECHNICAL SUPPORT

Genotyping Protocols

Standard PCR:Pdha1 alternative 1
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 B6.129P2-*Pdha1*^{tm1Ptl}/J mouse strain in a publication, please cite the originating article(s) and include JAX stock #017443 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

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

Recovery

Domestic Internatic

Pricing effective for USA, Canada and Mexico shipping destinations

CRYORECOVERY - DOMESTIC PRICING

SERVICE/PRODUCT	DESCRIPTION	PRICE
Cryo Recovery	X-linked: Heterozygous females and wildtype males for Pdha1<tm1Ptl>	$2,854.50

RELATED PRODUCTS AND SERVICES

Frozen Mouse Embryo	B6.129P2-Pdha1<tm1Ptl>/J	$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

LICENSING INFORMATION

Phone: 207-288-6470
Email: TechTran@jax.org

Related Strains

All

By Allele

By Gene

By Collection

TOMORROW'S CURES

Choose other country or region

Did you find what you were looking for?

Yes No