B6.129S1-*Plcb4* ^{tm1Dwu} /J

Stock No: **019024**

Congenic, Targeted Mutation

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

PLACE ORDER

inflammatory pain.

Donating Investigator

Melvin Simon, University of California, San Diego

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GENETIC OVERVIEW

Genetic Background	Generation

Plcb4^{tm1Dwu}

Allele Type	Gene Symbol	Gene Name
Targeted (Null/Knockout)	*Plcb4*	phospholipase C, beta 4

VIEW GENETICS

RESEARCH APPLICATIONS

Sensorineural Research
Developmental Biology Research
Neurobiology Research

VIEW ALL RESEARCH APPLICATIO

BASE PRICE

Starting at:

$2,854.50 Domestic price Cryo Recovery

VIEW PRICE LIST

Details

Detailed Description

Phospholipase C, beta 4, is involved in retina signal transduction, specifically the photocascade in the rod outer segment. Mutations in human *PLCB4* are a cause of auriculo-condylar syndrome-2.
Mice that are homozygous for this *Plcb4* targeted mutation are viable and fertile, but have shortened lifespans. The Donating Investigator reports that homozygotes are difficult to breed. No gene product (protein) is detected by Western blot analysis of retinal tissue and cerebellum or by immunohistochemical analysis of brain tissue from homozygotes.
Homozygotes exhibit abnormal electroretinograms (reduced a-wave
and b-wave) and impaired visual processing, as assessed by a shuttle box test. At approximately 3 weeks of age, homozygotes are ataxic with uncoordinated locomotion, body swaying and intention tremors. Histological examination of rostral cerebellum from homozygotes reveals more Purkinje cells remain multiply-innervated when compared to controls. Although the inflammatory response to a formalin nociceptive test is similar to that seen in controls, the formalin-induced inflammatory pain behavior is reduced in homozygous mice.
The Donating Investigator reports that homozygotes are difficult to breed, and have a lifespan of approximately 4 to 6 months

Development

Control Suggestions

Selected References

Genetics

Plcb4^{tm1Dwu}

Disease/Phenotype

Disease Terms

Research Areas By Phenotype

Mammalian Phenotype Terms by Genotype

References

Technical Support

CONTACT TECHNICAL SUPPORT

Genotyping Protocols

Separated PCR:Plcb4alternate2
Genotyping resources and troubleshooting

Breeding Considerations

When maintaining a live colony, these mice can be bred as heterozygotes. The Donating Investigator reports homozygotes are difficult to breed, and have a lifespan of approximately 4 to 6 months.

Additional Breeding and Husbandry Support

Citation

When using the B6.129S1-*Plcb4*^{tm1Dwu}/J mouse strain in a publication, please cite the originating article(s) and include JAX stock #019024 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 | Internatic

Pricing effective for USA, Canada and Mexico shipping destinations

CRYORECOVERY - DOMESTIC PRICING

SERVICE/PRODUCT	DESCRIPTION	PRICE
Cryo Recovery	Heterozygous or wildtype for Plcb4<tm1Dwu>	$2,854.50

RELATED PRODUCTS AND SERVICES		
Frozen Mouse Embryo	B6.129S1-Plcb4<tm1Dwu>/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

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General Terms and Conditions

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LICENSING INFORMATION

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Email: TechTran@jax.org

Related Strains

All

By Allele

By Gene

By Collection

Choose other country or region

Did you find what you were looking for?

Yes No