

**C57BL/6-Prkcd<sup>tm1.1Chou</sup> /J**

Stock No: **028437** | AS PKCδ

 Coisogenic, Targeted Mutation

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

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mice are useful when studying PKC&delta substrates for mapping downstream signaling pathways.

### Donating Investigator

Wen-Hai Chou , Kent State University

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## GENETIC OVERVIEW

Genetic Background

Generation

*Prkcd<sup>tm1.1Chou</sup>*

Alele Type

Gene Symbol

Gene Name

Targeted (Not Applicable)

*Prkcd*

protein kinase C, delta

VIEW GENETICS

## RESEARCH APPLICATIONS

Cell Biology 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

AS *PKCδ* mice contain the amino acid mutation M425A in exon 13 of the endogenous protein kinase C, delta (*Prkcd*) gene. PKCδ plays a role in stroke-reperfusion injury by stimulating the infiltration of neutrophils to the ischemic brain tissues. Neutrophils release free radicals, proteases, and cytokines to promote further recruitment of neutrophils and other leukocytes to the site of injury. These inflammatory responses lead to secondary damage to the effected tissue. The M425A mutation introduces a conformational change in the “gatekeeper residue” which lies in the middle of the catalytic domain and is a key residue for determining the selectivity of kinase inhibitors. This AS mutation allows AS PKCδ to use ATP analogs, such as N6-(benzyl)-ATP, and can be specifically inhibited by and PP1 analogs, such as , such as N6-(benzyl)-ATP, 1NA-PP1 and 2MB-PP1.

### Development

### Control Suggestions

### Selected References

## Genetics

### *Prkcd*<sup>tm1.1Chou</sup>

## Disease/Phenotype

### Disease Terms

### Research Areas By Phenotype

### Mammalian Phenotype Terms by Genotype

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

Sanger sequencing:[Prkcd SEQ](#)

Standard PCR:[Prkcdalternate1](#)

[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 AS PKCδ mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #028437 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 for Prkcd<tm1.1Chou>	\$2,854.50

## RELATED PRODUCTS AND SERVICES

Frozen Mouse Embryo

C57BL/6-Prkcd<tm1.1Chou>/J Frozen Embryo

\$2595.00

## PAYMENT TERMS AND CONDITIONS

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## Terms Of Use

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[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



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