

**B6;129S1-Trpc2<sup>tm1Dlc</sup>/J**

Stock No: **021208**

 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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behavior modifications.

### Donating Investigator

Catherine Dulac, Harvard University, HHMI

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## GENETIC OVERVIEW

Genetic Background

Generation

*Trpc2<sup>tm1Dlc</sup>*

**Alele Type**

Targeted (Null/Knockout)

**Gene Symbol**

*Trpc2*

**Gene Name**

transient receptor potential cation channel, subfamily C, member 2

VIEW GENETICS

## RESEARCH APPLICATIONS

Cell Biology Research

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

In mouse, the *Trpc2* (transient receptor potential cation channel, subfamily C, member 2) gene is expressed primarily in the neurons of the vomeronasal organ (VNO). It is involved with processes of pheromone detection which impact social behaviors. The protein is not expressed by humans, which carry a pseudogene.

These targeted mutant mice carry a knockout of *Trpc2*. Western blot from the VNO shows elimination of expression. Homozygotes are deficient in VNO signaling and the detection of vomeronasal cues. Male mice deficient in TRPC2 expression fail to display male-male aggression, and they initiate sexual and courtship behaviors toward both males and females. Female mice deficient in TRPC2 show a reduction in maternal aggression and lactating behavior. They do display characteristics of male sexual and courtship behaviors such as mounting, pelvic thrust, solicitation, anogenital olfactory investigation, and emission of complex ultrasonic vocalizations towards male and female conspecific mice. In the adult, the number of V1R neurons in the homozygous mice is reduced by approximately 50% and the number of V2R-expressing neurons is reduced by approximately 75% in comparison with heterozygous mice.

#### Development

#### Control Suggestions

#### Selected References

### Genetics

#### *Trpc2*<sup>tm1Dlc</sup>

### Disease/Phenotype

#### Disease Terms

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[+ Research Areas By Phenotype](#)

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[+ Mammalian Phenotype Terms by Genotype](#)

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[+ References](#)

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## [- 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

Separated PCR: [Trpc2-Alternate 1](#)

[Genotyping resources and troubleshooting](#)

### Breeding Considerations

Heterozygotes and homozygotes are viable and fertile.

[Additional Breeding and Husbandry Support](#)

### Citation

When using the B6;129S1-*Trpc2*<sup>tm1Dlc</sup>/J mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #021208 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](#)*

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## [- 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 Trpc2<tm1Dlc>	\$2,854.50

RELATED PRODUCTS AND SERVICES		
<a href="#">Frozen Mouse Embryo</a>	B6;129S1-Trpc2<tm1Dlc>/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.

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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

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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

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