

**STOCK *Vsx1<sup>tm2Mci</sup>* /ChowJ**

Stock No: **026703** | *Vsx<sup>tm2Mci</sup>* knock-out

 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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retinal development.

Donating Investigator

Robert L. Chow, University of Victoria

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## GENETIC OVERVIEW

Genetic Background

Generation

*Vsx1<sup>tm2Mci</sup>*

**Alele Type**

Targeted (Reporter, Null/Knockout)

**Gene Symbol**

*Vsx1*

**Gene Name**

visual system homeobox 1

VIEW GENETICS

## RESEARCH APPLICATIONS

Research Tools

Sensorineural 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

The paired-like homeodomain transcription factor encoded by the *Vsx1* gene is important in retinal bipolar cell differentiation, and is expressed in differentiating and mature bipolar cells. Mutations in this gene have been associated with keratoconus-1, corneal dystrophies, and craniofacial anomalies. These *Vsx1* TLacZ knock-in reporter mice carry a targeted mutation of the *Vsx1* gene in which tau-lacZ and neo sequence was inserted into the ATG initiation site. Mice that are homozygous for the targeted mutation are viable and fertile. No gene product (protein) is detected by immunofluorescence analysis of retinal tissue from homozygotes.

$\beta$ -galactosidase activity mimics endogenous *Vsx1* pattern of expression, and is detected in a bipolar cells in the outer tier of the inner nuclear layer of the retina, in the ventral hindbrain and spinal cord, but not embryonic retina and cornea. Retinal electroretinography of homozygotes shows selective loss of b-wave amplitude in off-center bipolar cells.

#### Development

#### Expression Data

#### Control Suggestions

#### Selected References

### Genetics

#### *Vsx1*<sup>tm2Mci</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

Standard PCR:[Vsx1](#)

Standard PCR:[Generic IRES](#)

[Genotyping resources and troubleshooting](#)

#### Breeding Considerations

When maintaining a live colony, these mice can be bred as homozygotes.

[Additional Breeding and Husbandry Support](#)

#### Mating System

Heterozygote x Heterozygote

#### Citation

When using the  $Vsx^{tauLacZ}$  knock-out mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #026703 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 Vsx1<tm2Mci>	\$2,854.50

## RELATED PRODUCTS AND SERVICES

<a href="#">Frozen Mouse Embryo</a>	STOCK Vsx1<tm2Mci>/ChowJ	\$2595.00
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## 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



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