



STOCK *Shh*^{tm1Amc}/J

Stock No: 003318 | Shh-

Targeted Mutation



CRYO RECOVERY

PLACE ORDER

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

Overview

Also Known As: Shh-

These *Shh* knock-out mice exhibit defects in the establishment and maintenance of midline structures.

Donating Investigator

Andrew P McMahon, University of Southern California

READ MORE +

GENETIC OVERVIEW

Genetic Background Generation

Shh^{tm1Amc}

Allele Type	Gene Symbol	Gene Name
Targeted (Null/Knockout)	<i>Shh</i>	sonic hedgehog

V I E W G E N E T I C S

RESEARCH APPLICATIONS

Cancer Research
Dermatology Research
Developmental Biology Research
Neurobiology Research
Sensorineural Research
Cell Biology Research

V I E W A L L R E S E A R C H A P P L I C A T I O N S

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

Mice homozygous for the *Shh^{tm1Amc}* targeted mutation display early defects in the establishment and maintenance of midline structures. These defects result from the critical role the Sonic hedgehog (*Shh*) gene plays in the patterning of vertebrate embryonic tissues, including the brain and spinal cord, the axial skeleton and the limbs. Defects are also observed in all tissues, confirming the proposed role of SHH proteins as an extracellular signal required for the tissue-organizing properties of several vertebrate patterning centers.

When bred to a strain with *loxP* sites inserted into the same targeted allele (Stock No. [004293](#)) and a strain expressing Cre recombinase in the skin and dental epithelium (Stock No. [004782](#)), this mutant mouse strain may be useful in studies of hedgehog signalling and cell proliferation in the dental epithelium.

When bred to a strain with *loxP* sites inserted into the same targeted allele (Stock No. [004293](#)) and a strain expressing Cre recombinase in the mesonephric duct and its developmental derivatives (Stock No. [004692](#)), this mutant mouse strain may be useful in studies of hedgehog signaling and cell proliferation/differentiation in mesenchymal cells of the kidney.

+ Control Suggestions

+ Selected References

– Genetics

+ [Shh^{tm1Amc}](#)

– Disease/Phenotype

+ [Disease Terms](#)

+ [Research Areas By Genotype](#)

+ [Mammalian Phenotype Terms by Genotype](#)

+ [References](#)

– Technical Support

C H A T O  F L I N E

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: [Shh^{tm1Amc}](#)

[Genotyping resources and troubleshooting](#)

Breeding Considerations

Homozygotes are not viable. The strain is maintained by mating heterozygotes. The expected coat color from breeding is Black, White Bellied Agouti.

[Additional Breeding and Husbandry Support](#)

Appearance

agouti

Related Genotype: *A*?

black

Related Genotype: *a/a*

Citation

When using the Shh mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #003318 in your Materials and Methods section.

[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.

Cryorecovery - Domestic Pricing

SERVICE	GENOTYPE	PRICE
Cryo Recovery	Heterozygous or Wild-type for Shh<tm1Amc>	\$2,854.50

We will fulfill your order by providing at least two carriers for each strain ordered. The total number, sex, and genotypes provided will vary, although typically 8 or more animals are provided. Please check genotypes which will be recovered. While the genotypes of all animals produced will be communicated to you prior to scheduling shipment, the genotypes of animals provided may not reflect the mating scheme and genotypes described in the strain description. Animals are typically ready to ship in 11-14 weeks. If a second recovery is required to produce the minimum number of animals, then delivery time would increase to approximately 25 weeks. If we fail to produce animals of the correct genotype, you will not be charged. We cannot guarantee the reproductive success of mice shipped to your facility. If the mice are lost after the first three days (post-arrival) or do not produce progeny at your facility, a new order and fee will be necessary.

Cryorecovery to establish a [Dedicated Supply](#) for greater quantities of mice. Mice recovered can be used to establish a dedicated colony to contractually supply you mice according to your requirements. Price by quotation.

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Phone: 207-288-6470

Email: TechTran@jax.org

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