129X1-Smo tm1Amc/J

Stock No: 004288 | Smo-

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: Smo-

These Smo knock-out mice have an embryonic lethal phenotype and exhibit ventral cyclopia and holoprosencephaly.

Donating Investigator

Andrew P McMahon, University of Southern California

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**Details**

**Detailed Description**

Mice that are heterozygous for the targeted allele are viable, fertile, normal in size and do not display any gross physical or behavioral abnormalities. Homozygous null mice have an embryonic lethal phenotype, failing to develop past 9.5 days post coitum. Homozygous mutant mice exhibit ventral cyclopia and holoprosencephaly. During development homozygous mice fail to undergo embryonic turning, closure of the ventral midgut and normal rightward looping of the heart. The embryonic heart remains a linear tube. This mutant mouse strain represents a model that may be useful in studies of tumors and neural tube defects due to disruption of the hedgehog pathways.

When bred to a strain with loxP sites inserted into the same targeted allele (Stock No. 004526) and a strain expressing Cre recombinase in the skin (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. 004526) and a strain expressing Cre recombinase in the nervous system (Stock No. 003771), this mutant mouse strain may be useful in studies of hedgehog signalling and cerebellar foliation.

When bred to a strain with loxP sites inserted into the same targeted allele (Stock No. 004526) and a strain expressing Cre recombinase in the midbrain/dorsal spinal cord (Stock No. 007807), this mutant mouse strain may be useful in studies of craniofacial development.
Control Suggestions

Genetics

Smo<sup>Int1/Anc</sup>

Disease/Phenotype

Disease Terms

Research Areas By Genotype

Mammalian Phenotype Terms by Genotype

References

Technical Support

CONTACT TECHNICAL SUPPORT

Genotyping Protocols
Separated PCR: Smo<sup>Int1/Anc</sup>
Genotyping resources and troubleshooting

Breeding Considerations
This strain originated on a 129 background, and is maintained on the same. Upon arrival at The Jackson Laboratory, the transgenic allele was eliminated. Expected coat color is: White Bellied Agouti
Additional Breeding and Husbandry Support

Citation
When using the ENU mouse strain in a publication, please cite the originating article(s) and include JAX stock #004288 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.

Domestic | International
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.

Payment Terms and Conditions
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