

C57BL/6-Lias^{tm2Mae}/1J
Stock No: **008348** | *Lias*^{High}

◆ 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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stress and the role of antioxidants in disease.

Donating Investigator

Dr. Nobuyo Maeda, University of North Carolina at Chapel Hill

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GENETIC OVERVIEW

Genetic Background

Generation

Lias^{tm2Mae}

Alele Type

Targeted (Conditional ready
(e.g. floxed))

Gene Symbol

Lias

Gene Name

lipoic acid synthetase

VIEW GENETICS

RESEARCH APPLICATIONS

Research Tools

Diabetes and Obesity 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 targeted *Lias* gene encodes a lipoic acid synthetase that is critical in synthesis of alpha-lipoic acid. These *Lias*^{High} mice carry a hypermorph allele of *Lias* gene, with bovine growth hormone gene 3'-UTR sequence directing expression of the endogenous *Lias*. Homozygous *Lias*^{High} mice have stabilized *Lias* transcripts resulting in overexpression and LIAS protein levels approximately 150% compared to levels in wildtype mice, as assessed by Western blot analysis of kidney tissue. The bovine growth hormone gene 3'-UTR sequence is flanked by *loxP* sites: when crossed to a strain expressing Cre recombinase, the bovine growth hormone gene 3'-UTR sequence is excised and expression of *Lias* is controlled by the *cFos* gene 3'-UTR.

When crossed with C57BL/6-*Ins2*^{Akita}/J mice (Stock No. [003548](#)) the resulting double mutant mice exhibit less severe diabetic nephropathy and lower oxidative stress when compared to the single mutant C57BL/6-*Ins2*^{Akita}/J mice.

Development

Control Suggestions

Selected References

Genetics

Lias^{tm2Mae}

Disease/Phenotype

Disease Terms

[+ Research Areas By Phenotype](#)

[+ Mammalian Phenotype Terms by Genotype](#)

[+ References](#)

[- 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

[Genotyping resources and troubleshooting](#)

Breeding Considerations

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

[Additional Breeding and Husbandry Support](#)

Citation

When using the *Lias^{High}* mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #008348 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

RELATED PRODUCTS AND SERVICES

Frozen Mouse Embryo

C57BL/6-Lias<tm2Mae>/1J Frozen Embryo

\$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.

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](#)

QUESTIONS ABOUT TERMS OF USE

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[Related Strains](#)

All

By Allele

By Gene

By Collection



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