



B6.Cg-Tg(SOD1*G93A)1Gur/J

Stock No: 004435 | B6.SOD1-G93A

 Congenic, Transgenic



AVAILABLE NOW

PLACE ORDER

Live mice available in varying quantities. Ask Customer Service for details.

 Overview



Also Known As: B6.SOD1-G93A

These SOD1-G93A transgenic mice express a G93A mutant form of human *SOD1* and may be useful in studying neuromuscular disorders such as Amyotrophic Lateral Sclerosis (ALS or Lou Gehrig's Disease).

Our preclinical efficacy testing services offer scientific expertise and an array of target-based and phenotype-based outcome measures, both in vivo and at endpoint, for flexible study designs and assay development in mouse models of Amyotrophic Lateral Sclerosis. [See our full service platform.](#)

Donating Investigator

Gregory Cox, The Jackson Laboratory

READ MORE +

GENETIC OVERVIEW

Genetic Background

Generation

[N28+N45](#)

(2019-06-14 00:00:00)

[Tg\(SOD1*G93A\)1Gur](#)

Allele Type

Transgenic (Inserted expressed sequence, Humanized sequence)

VIEW GENETICS

RESEARCH APPLICATIONS

Metabolism Research

Neurobiology Research

VIEW ALL RESEARCH APPLICATIONS

BASE PRICE

Starting at:

\$270.00 Domestic price for female 4-week

296.83 Domestic price for breeder pair

VIEW PRICE LIST

Details

Detailed Description

Mice hemizygous for this SOD1-G93A (also called G93A-SOD1) transgene are viable and fertile, with transgenic expression of a G93A mutant form of human *SOD1*. This founder line (often referred to as G1H) is reported to have high transgene copy number. Hemizygotes exhibit a phenotype similar to amyotrophic lateral sclerosis (ALS) in humans; becoming paralyzed in one or more limbs with paralysis due to loss of motor neurons from the spinal cord. Motor neuron degeneration has been associated with function and/or degeneration of astrocytes, the major glial cell type of the nervous system.

Transgenic mice have an abbreviated life span: 50% survive at 157.1±9.3 days (in contrast to the mixed B6SJL background where 50% survival is observed at 128.9±9.1 days).

Female hemizygotes are poor breeders, and rarely produce more than one litter before the onset of disease. In contrast to LPS-induced microglia and activated M1/M2 macrophages, spinal cord microglia activated by disease progression do not upregulate genes that display a bias to either an M1 (neurotoxic) phenotype or an M2 (protective) phenotype. The pattern of gene expression in SOD1^{G93A} activated microglia represents a unique ALS-specific signature. These SOD1-G93A (also called G93A-SOD1) transgenic mice may be useful in studying neuromuscular disorders, including Amyotrophic Lateral Sclerosis (ALS or Lou Gehrig's Disease).

In an attempt to offer alleles on well-characterized or multiple genetic backgrounds, alleles are frequently moved to a genetic background different from that on which an allele was first characterized. As the SOD1-G93A transgenic mice were originally created on a mixed genetic background, it should be noted that the phenotype of the congenic mice could vary from that originally described. We will modify the strain description if necessary as published results become available.

Development

Expression Data

Control Suggestions

Selected References

Genetics

Tg(SOD1*G93A)1Gur

– 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:[Tg\(SOD1*G93A\)1Gur](#)

Standard PCR:[Tg\(SOD1*G93A\)1Gur](#)

[Genotyping resources and troubleshooting](#)

Dietary Information

LabDiet® 5K52 formulation (6% fat)

Breeding Considerations

When maintaining the live congenic colony, hemizygous carriers (preferably males) are bred with C57BL/6J inbred mice. Female hemizygotes are poor breeders, and rarely produce more than one litter before the onset of disease. Coat color expected from breeding is black.

[Additional Breeding and Husbandry Support](#)

Mating System

Inbred x Hemizygote

C57BL/6J females (000664) x Hemizygot

Citation

When using the B6.SOD1.G93A mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #004435 in your Materials and Methods section.

[Facility Barrier Level Descriptions](#)

 [AX11 \(Maximum\)](#)

– Pricing & Availability



Live mice available in varying quantities. Ask Customer Service for details.

Available Now

Domestic **International**

Pricing effective for USA, Canada and Mexico shipping destinations

Live Mouse

AGE	SEX	GENOTYPE	PRICE
4 weeks	Female	Hemizygous for Tg(SOD1-G93A)1Gur	\$270.00
	Male	Hemizygous for Tg(SOD1-G93A)1Gur	\$270.00
4 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
5 weeks	Female	Hemizygous for Tg(SOD1-G93A)1Gur	\$270.00
	Male	Hemizygous for Tg(SOD1-G93A)1Gur	\$270.00
5 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
6 weeks	Female	Hemizygous for Tg(SOD1-G93A)1Gur	\$270.00
	Male	Hemizygous for Tg(SOD1-G93A)1Gur	\$270.00
6 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
7 weeks	Female	Hemizygous for Tg(SOD1-G93A)1Gur	\$270.00
	Male	Hemizygous for Tg(SOD1-G93A)1Gur	\$270.00
7 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
8 weeks	Female	Hemizygous for Tg(SOD1-G93A)1Gur	\$270.00
	Male	Hemizygous for Tg(SOD1-G93A)1Gur	\$270.00
8 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51

Breeder Pair		
SEX	GENOTYPE	PRICE
Female	C57BL/6J (000664)	\$296.83
Male	Hemizygous for Tg(SOD1-G93A)1Gur	

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.

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.](#)

Licensing Information

Phone: 207-288-6470

Email: TechTran@jax.org

JAX® Mice, Products & Services Conditions of Use

"MICE" means mouse strains, their progeny derived by inbreeding or crossbreeding, unmodified derivatives from mouse strains or their progeny supplied by The Jackson Laboratory ("JACKSON"). "PRODUCT(S)" means biological materials supplied by JACKSON, and their derivatives. "SERVICES" means projects conducted by JACKSON for other parties that may include but are not limited to the use of MICE or PRODUCTS. "RECIPIENT" means each recipient of MICE, PRODUCTS, or SERVICES provided by JACKSON including each institution, its employees and other researchers under its control. MICE or PRODUCTS shall not be: (i) used for any purpose other than internal research, (ii) sold or otherwise provided to any third party for any use, or (iii) provided to any agent or other third party to provide breeding or other services. Acceptance of MICE, PRODUCTS or SERVICES from JACKSON shall be deemed as agreement by RECIPIENT to these conditions, and departure from these conditions requires JACKSON's prior written authorization.

No Warranty

MICE, PRODUCTS AND SERVICES ARE PROVIDED "AS IS". JACKSON EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS, IMPLIED, OR STATUTORY, WITH RESPECT TO MICE, PRODUCTS OR SERVICES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY OF NON-INFRINGEMENT OF ANY PATENT, TRADEMARK, OR OTHER INTELLECTUAL PROPERTY RIGHTS.

Credit for PRODUCTS or SERVICES

In case of dissatisfaction for a valid reason and claimed in writing by a purchaser within ninety (90) days of receipt of, PRODUCTS or SERVICES, JACKSON will, at its option, provide credit or replacement for the PRODUCT received or the SERVICES provided; JACKSON makes no other representations and this shall be the exclusive remedy of the purchaser. [Please note specific policy for live mice.](#)

Animal Care and Use for SERVICES

Consistent with the requirement for a written understanding regarding animal care and use, the JACKSON Animal Care and Use Committee will review the animal care and use protocol(s) associated with any SERVICES to be performed at JACKSON, and JACKSON shall have ultimate responsibility and authority for the care of animals while on site or in JACKSON custody.

No Liability

In no event shall JACKSON, its trustees, directors, officers, employees, and affiliates be liable for any causes of action or damages, including any direct, indirect, special, or consequential damages, arising out of the provision of MICE, PRODUCTS, or SERVICES, including economic damage or injury to property and lost profits, and including any damage arising from acts or negligence on the part of JACKSON, its agents or employees. Unless prohibited by law, in purchasing or receiving MICE, PRODUCTS, or SERVICES from JACKSON, purchaser or recipient, or any party claiming by or through them, expressly releases and discharges JACKSON from all such causes of action or damages, and further agrees to defend and indemnify JACKSON from any costs or damages arising out of any third party claims.

MICE, PRODUCTS or SERVICES are to be used in a safe manner and in accordance with all applicable governmental rules and regulations.

The foregoing represents the General Terms and Conditions applicable to JACKSON's MICE, PRODUCTS or SERVICES. In addition, special terms and conditions of sale of certain MICE, PRODUCTS, or SERVICES may be set forth separately in JACKSON web pages, catalogs, price lists, contracts, and/or other documents, and these special terms and conditions shall also govern the sale of these MICE, PRODUCTS and SERVICES by JACKSON, and by its licensees and distributors.

Acceptance of delivery of MICE, PRODUCTS or SERVICES shall be deemed agreement to these terms and conditions. No purchase order or other document transmitted by purchaser or recipient that may modify the terms and conditions hereof, shall be in

any way binding on JACKSON, and instead the terms and conditions set forth herein, including any special terms and conditions set forth separately, shall govern the sale of MICE, PRODUCTS or SERVICES by JACKSON.

☰ Related Strains

All

By Allele

By Gene

By Collection

All Related Strains



DO YOU NEED BALB/c MICE?

Rely on JAX to provide the models you need, when you need them.

LEARN MORE



CONTACT



DONATE



SUBSCRIBE

JAX HOME CAREERS PRIVACY POLICY TERMS OF USE

RESEARCH CENTERS MOUSE GENOME INFORMATICS

MOUSE PHENOME DATABASE

Leading the search for

TOMORROW'S CURES

©2020 THE JACKSON LABORATORY

Choose other country or region 