

B6.C3-*Gusb*^{mps-2J}/BrkJ

Stock No: 006557

 Congenic, Spontaneous Mutation

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

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Donating Investigator

Brian Soper, The Jackson Laboratory

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GENETIC OVERVIEW

Genetic Background

Generation

000664 C57BL/6J

Gusb^{mps-2J}

Alele Type

Gene Symbol

Gene Name

Spontaneous

Gusb

glucuronidase, beta

VIEW GENETICS

RESEARCH APPLICATIONS

Metabolism Research

Developmental Biology Research

Mouse/Human Gene Homologs

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

Mice homozygous for the Gus^{mps-2J} allele exhibit a phenotype similar to Gus^{mps} homozygotes including skeletal deformities, lysosomal storage disease and elevated levels of the lysosomal enzymes alpha-galactosidase and beta-hexosaminidase (Gwynn et al., 1998). Like the Gus^{mps} heterozygote, Gus^{mps-2J} heterozygotes have a 26-85% reduction in beta-glucuronidase activity depending on tissue type (Gwynn et al., 1998, Birkenmeier et al., 1989). Homozygotes of both alleles have beta-glucuronidase activity levels at 1% of the control level. Unlike the Gus^{mps} homozygote, Gus^{mps-2J} homozygotes on the C3H background live longer, are fertile and can raise litters to weaning age (Gwynn et al., 1998). In addition to a difference in the nature of the mutations between these two alleles, it is also likely that the phenotypic differences are the result of strain background. C3H/HeOwJ mice carry a different set of alleles at the Gus complex than C57BL/6J mice. Beta-glucuronidase activity in C3H/HeOwJ mice is 10-38% that of C57BL/6J mice (Gwynn et al., 1998). The Gus complex alleles determine the rate of enzyme synthesis and may modulate the expression of the beta-glucuronidase deficiency. This strain is a model for the human lysosomal storage disease, mucopolysaccharidosis type VII.

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. This is the case for the strain above. It should be noted that the phenotype could vary from that originally described.

Development

Control Suggestions

Genetics

$Gusb^{mps-2J}$

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

Standard PCR:[Gusb](#)

[Genotyping resources and troubleshooting](#)

Citation

When using the B6.C3-*Gusb*^{mps-2J}/BrkJ mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #006557 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
Cryo Recovery	Heterozygous for <i>Gusb</i> <mps-2J>	\$2,854.50

RELATED PRODUCTS AND SERVICES

Frozen Mouse Embryo

B6.C3-Gusb<mps-2J>/BrkJ

\$2595.00

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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.

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Q U E S T I O N S A B O U T T E R M S O F U S E

LICENSING INFORMATION

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Related Strains

All

By Allele

By Gene

By Collection



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