

B6.129P2-Sptbn2^{Gt(XK442)Byg}/LlpJ

Stock No: 012723

 Congenic, Gene Trap

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

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model for studying glutamate transport dynamics, synaptogenesis, seizures, and neuronal damage.

Donating Investigator

Dr. Luanne Peters, The Jackson Laboratory

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GENETIC OVERVIEW

Genetic Background

Generation

Sptbn2^{Gt(XK442)Byg}

Alele Type

Gene trapped (Reporter, Null/Knockout)

Gene Symbol

Sptbn2

Gene Name

spectrin beta, non-erythrocytic 2

VIEW GENETICS

RESEARCH APPLICATIONS

Research Tools

Developmental Biology Research

Neurobiology 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

Homozygous *Sptbn2*^{-/-} mice are viable and fertile, and are prone to a mild nonprogressive ataxia and stimulus-induced seizures. This gene trap mutation abolishes endogenous spectrin beta 3 (*Sptbn2*) gene function and expresses a β-galactosidase (β-geo) reporter fusion protein. In these mice synapse morphology is altered, and there is a reduction in synapse-associated proteins, EAAT4, EAAT1, GluRδ, IP3R, and NCAM 140, leading to a failure to assemble transporters, receptors, and adhesion molecules. These *Sptbn2*^{-/-} mice may be useful as a *lacZ* reporter for *Sptbn3* expression or as a knockout model for studying glutamate transport dynamics, synaptogenesis, seizures, and neuronal damage.

Development

Control Suggestions

Selected References

Genetics

Sptbn2^{Gt(XK442)Byg}

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, homozygous mice may be bred together.

[Additional Breeding and Husbandry Support](#)

Citation

When using the B6.129P2-*Sptbn2*^{Gt(XK442)Byg}/LlpJ mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #012723 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>Spnb3</i> <Gt(XK442)Byg>	\$2,854.50

RELATED PRODUCTS AND SERVICES

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Phone: 207-288-6470

Email: TechTran@jax.org

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By Allele

By Gene

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