The Jackson Laboratory

B6;SJL-Tg(Oxt/EGFP)AI03Wsy/J

Stock No: **006043** | AI-03

Transgenic

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

PLACE ORDER

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oxytocin-magnocellular neurons of the paraventricular and supraoptic nuclei of the hypothalamus.

Donating Investigator

Dr. W. Scott Young III, National Institute of Mental Health

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GENETIC OVERVIEW

Genetic Background **Generation**

Tg(Oxt/EGFP)AI03Wsy

Allele Type

Transgenic (Reporter)

VIEW GENETICS

RESEARCH APPLICATIONS

Neurobiology Research
Endocrine Deficiency Research
Research Tools

VIEW ALL RESEARCH APPLICATION

BASE PRICE

Starting at:

$2,854.50 Domestic price Cryo Recovery

VIEW PRICE LIST

Details

Detailed Description

Hemizygous mice are viable and fertile with no gross or behavioral abnormalities. This transgene expresses an enhanced green fluorescent protein (EGFP) fused to the end of the neurophysin at the C-terminus of the oxytocin pre-prohormone. The transgene is selectively expressed in oxytocin-magnocellular neurons of the paraventricular and supraoptic nuclei of the hypothalamus. The fusion protein is faithfully trafficked to secretory granules and transported to neurosecretory terminals in the neurohypophysis, where the EGFP fluorescence undergoes depolarization-induced calcium-dependent secretion. Immunohistochemical detection of EGFP in individual oxytocin-magnocellular neurons is suggested as intrinsic fluorescence is low. However, the endogenous fluorescence in the neural lobes is sufficiently intense to image secretory events in individual oxytocin nerve terminals (neurosecretosomes) isolated from the posterior pituitary. These mice may be useful in studies of hormone biology, pharmacology, and to visualize neurosecretion.

Development

Expression Data

Control Suggestions

Genetics

Tg(Oxt/EGFP)AI03Wsy

Disease/Phenotype

Disease Terms

Research Areas By Phenotype

Mammalian Phenotype Terms by Genotype

References

Technical Support

CONTACT TECHNICAL SUPPORT

Genotyping Protocols

Standard PCR:Tg(Oxt/EGFP)AI03Ws Alternate1
Probe:Fluorescent Proteins (Generic GFP)
Standard PCR:Fluorescent Proteins (Generic GFP)
Genotyping resources and troubleshooting

Breeding Considerations

When maintaining a live colony, transgenic mice are bred to wildtype siblings.

Additional Breeding and Husbandry Support

Citation

When using the AI-03 mouse strain in a publication, please cite the originating article(s) and include JAX stock #006043 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 **Internatio**

Pricing effective for USA, Canada and Mexico shipping destinations

CRYORECOVERY - DOMESTIC PRICING

SERVICE/PRODUCT	DESCRIPTION	PRICE
Cryo Recovery	Hemizygous or Non carrier for Tg(Oxt/EGFP)AI03Wsy	$2,854.50

RELATED PRODUCTS AND SERVICES		
Frozen Mouse Embryo	B6;SJL-Tg(Oxt/EGFP)AI03Wsy/J	$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

LICENSING INFORMATION

Phone: 207-288-6470
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Related Strains

All

By Allele

By Gene

By Collection