

B6.Cg-Tg(Cspg4-cre/Esr1*)BAkik/J

Stock No: **008538** | NG2-CreER™

 Congenic, Transgenic

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

PLACE ORDER

[Email](#) [Download PDF](#) [Help](#)

Cre-mediated recombination is expected to result in deletion of the floxed sequences in the Cre recombinase-expressing tissues of the offspring. These NG2CreER™ BAC transgenic mice may be useful for inducible Cre recombinase expression in NG2-expressing glia (polydendrocytes, oligodendrocyte progenitor cells) in the central nervous system and NG2-expressing cells in other organs.

Donating Investigator

Akiko Nishiyama, University of Connecticut

READ MORE +

GENETIC OVERVIEW

Genetic Background

Generation

N7+N3F6
(2019-12-31 00:00:00)

Tg(Cspg4-cre/Esr1*)BAkik

Alele Type

Transgenic (Recombinase-expressing, Inducible)

VIEW GENETICS

RESEARCH APPLICATIONS

Research Tools

Neurobiology Research

VIEW ALL RESEARCH APPLICATIONS

BASE PRICE

Starting at:

\$255.00 Domestic price for female 4-week

333.51 Domestic price for breeder pair

V I E W P R I C E L I S T

Details

Detailed Description

Mice hemizygous for the NG2CreERTM BAC transgene are viable and fertile, with the mouse NG2 (*Cspg4*) promoter/enhancer directing expression of a tamoxifen-inducible Cre recombinase (CreERTM). This CreERTM fusion protein is estrogen insensitive, and is only active when it binds the estrogen analog 4-hydroxytamoxifen (OHT) or tamoxifen. When these NG2CreERTM BAC transgenic mice are bred with mice containing *loxP*-flanked sequences, tamoxifen-inducible Cre-mediated recombination is expected to result in deletion of the floxed sequences in the Cre recombinase-expressing tissues of the offspring. No background *cre* activity is reported in the absence of tamoxifen. Following tamoxifen administration, the majority of Cre recombinase activity is reported in NG2-expressing glia (polydendrocytes, oligodendrocyte progenitor cells). The donating investigator specifically reports that tamoxifen-induced Cre recombinase activity is observed throughout the postnatal central nervous system; including the gray and white matter of the brain, cerebellum and spinal cord, and vascular mural cells. In addition, tamoxifen-induced Cre recombinase activity is not found in astrocytes, resting microglia, or neurons before postnatal day (p)60 (and <1% of neurons when *cre* is induced at/after p60). The donating investigator summarizes the *cre* induction efficiency in postnatal tissues as 45-50% of NG2 cells in P2-P60 brain and spinal cord, and has not extensively studied this in embryonic tissues. With tamoxifen administration, the Cre recombinase activity of these NG2CreERTM BAC transgenic mice is similar to that observed for the NG2creBAC mice with the same NG2 promoter/enhancer driving a constitutively active Cre recombinase (Stock No. 008533).

The CreERTM fusion protein consists of Cre recombinase fused to a G525R mutant form of the mouse estrogen receptor; which does not bind its natural ligand (17β-estradiol) at physiological concentrations but will bind the synthetic estrogen receptor ligands 4-hydroxytamoxifen (OHT or tamoxifen) and, with lesser sensitivity, ICI 182780. Restricted to the cytoplasm, Cre-ERT can only gain access to the nuclear compartment after exposure to tamoxifen. To counteract the mixed estrogen agonist effects of tamoxifen injections, which can result in late fetal abortions in pregnant mice, progesterone may be coadministered.

Development

Expression Data

Control Suggestions

Selected References

– Genetics

+ [Tg\(Cspg4-cre/Esr1*\)BAkik](#)

– 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:[Generic FLPO](#)

Probe:[Generic FLP](#)

Standard PCR:[Generic Cre](#)

Separated PCR:[Tg\(Cspg4-cre/Esr1*\)BAkik-Chr14](#)

[Genotyping resources and troubleshooting](#)

Dietary Information

LabDiet® 5K52 formulation (6% fat)

Breeding Considerations

When maintaining a live colony, transgenic carrier mice may be bred together, to wildtype (noncarrier) mice from the colony, or to C57BL/6J inbred mice (Stock No. [000664](#)).

[Additional Breeding and Husbandry Support](#)

Mating System

Noncarrier x Hemizygote

Citation

When using the NG2-CreERTM mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #008538 in your Materials and Methods section.

Animal Health Reports

[Facility Barrier Level Descriptions](#)

 [AX10 \(Standard\)](#)

➔ Pricing & Availability



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

Available

Domestic | International

Pricing effective for USA, Canada and Mexico shipping destinations

LIVE MOUSE			
AGE	SEX	GENOTYPE	PRICE
4 weeks	Female	Hemizygous for Tg(Cspg4-cre/Esr1*)BAkik	\$255.00
	Male	Hemizygous for Tg(Cspg4-cre/Esr1*)BAkik	\$255.00
4 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
5 weeks	Female	Hemizygous for Tg(Cspg4-cre/Esr1*)BAkik	\$255.00
	Male	Hemizygous for Tg(Cspg4-cre/Esr1*)BAkik	\$255.00
5 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
6 weeks	Female	Hemizygous for Tg(Cspg4-cre/Esr1*)BAkik	\$255.00
	Male	Hemizygous for Tg(Cspg4-cre/Esr1*)BAkik	\$255.00
6 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
7 weeks	Female	Hemizygous for Tg(Cspg4-cre/Esr1*)BAkik	\$255.00
	Male	Hemizygous for Tg(Cspg4-cre/Esr1*)BAkik	\$255.00
7 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
8 weeks	Female	Hemizygous for Tg(Cspg4-cre/Esr1*)BAkik	\$255.00
	Male	Hemizygous for Tg(Cspg4-cre/Esr1*)BAkik	\$255.00
8 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
9 weeks	Female	Hemizygous for Tg(Cspg4-cre/Esr1*)BAkik	\$255.00
	Male	Hemizygous for Tg(Cspg4-cre/Esr1*)BAkik	\$255.00
9 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
10 weeks	Female	Hemizygous for Tg(Cspg4-cre/Esr1*)BAkik	\$255.00

	SEX	Genotype	PRICE
		Hemizygous for Tg(Cspg4-cre/Esr1*)BAkik	\$255.00
10 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
11 weeks	Female	Hemizygous for Tg(Cspg4-cre/Esr1*)BAkik	\$255.00
	Male	Hemizygous for Tg(Cspg4-cre/Esr1*)BAkik	\$255.00
11 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
12 weeks	Female	Hemizygous for Tg(Cspg4-cre/Esr1*)BAkik	\$255.00
	Male	Hemizygous for Tg(Cspg4-cre/Esr1*)BAkik	\$255.00
12 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51

BREEDER PAIR			PRICE
SEX	GENOTYPE		
Female	Hemizygous for Tg(Cspg4-cre/Esr1*)BAkik		\$333.51
Male	Noncarrier		
Female	Noncarrier		\$333.51
Male	Hemizygous for Tg(Cspg4-cre/Esr1*)BAkik		

RELATED PRODUCTS AND SERVICES		
Frozen Mouse Embryo	B6.Cg-Tg(Cspg4-cre/Esr1*)BAkik/J 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

[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 prior to shipping.](#)
[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

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



↑
E E E D B

Did you find what you were looking for?

Yes No