

C57BL/6-Tg(Nr4a1-EGFP/cre)820Khog/J

Stock No: **016617** | Nur77^{GFP}

◆ Coisogenic, Transgenic

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

PLACE ORDER

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

expressed mainly in a subset of myeloid lineage cells of the spleen. These mice may be useful in studying thymocyte positive- and negative-selection as well as lymphocyte activation.

Donating Investigator

Kristin A Hogquist, University of Minnesota

READ MORE +

GENETIC OVERVIEW

Genetic Background

Generation

N8F2
(2021-04-05 00:00:00)

Tg(Nr4a1-EGFP/cre)820Khog

Alele Type

Transgenic (Recombinase-expressing)

VIEW GENETICS

RESEARCH APPLICATIONS

Developmental Biology Research
Immunology, Inflammation and Autoimmunity Research
Research Tools
Cancer Research
Cell Biology Research
Hematological 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

The Jackson Laboratory Repository has Nur77-GFPCre BAC transgenic mice available on a fully C57BL/6N congenic background (~N10+; Stock No. [018974](#)) and an incipient congenic C57BL/6N background (~N5; Stock No. 016617). Transgenic mice on the incipient congenic C57BL/6N background are described here.

Mice hemizygous for the Nur77-GFPCre BAC transgene (Nur77^{GFP} BAC transgenic mice) are viable and fertile with normal lymphoid and myeloid development. Nur77-GFPCre BAC transgenic mice express an enhanced green fluorescent protein/codon-optimized "humanized" Cre recombinase fusion protein (eGFP-hCre) under control of the *Nr4a1* (Nur77) promoter/enhancer regions within the BAC transgene. Nur77-GFPCre BAC transgenic mice from founder line B6-820 exhibit GFP expression patterns consistent with endogenous Nur77. Specifically, GFP is highly expressed in a subset of myeloid lineage cells of the spleen (but not lymph node), while low levels of GFP are observed in T and B lymphocytes. GFP is up-regulated by antigen receptor stimulation in Nur77-GFPCre BAC transgenic mice, but unlike the CD69 marker of T cell activation, GFP is not induced by inflammatory stimuli. Furthermore, the level of GFP expressed during acute activation reflects the strength of T cell receptor (TCR) stimulation, and the low basal level of GFP expressed in mature naive T cells is dependent on continued interaction with MHC. The donating investigator reports that Cre recombinase activity is observed in all hematopoietic cells at some point in their development (June 2011). Because GFP expression level correlates to the strength of antigen receptor signaling in Nur77-GFPCre BAC transgenic mice, these mice may be useful in studying thymocyte positive- and negative-selection as well as lymphocyte activation; specifically T- and B-cell receptor (TCR and BCR) signal strength perceived by different T- and B-cell subsets during development or activation.

Development

Expression Data

Control Suggestions

Selected References

Genetics

[+ Tg\(Nr4a1-EGFP/cre\)820Khog](#)

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: [Tg\(Nr4a1-EGFP/cre\)820Khog Alternate1](#)

[Genotyping resources and troubleshooting](#)

Dietary Information

LabDiet® 5K52 formulation (6% fat)

Breeding Considerations

When maintaining a live colony, hemizygous mice may be bred with wildtype (noncarrier) mice from the colony or with C57BL/6NJ inbred mice (Stock No. [005304](#)).

[Additional Breeding and Husbandry Support](#)

Mating System

Noncarrier x Hemizygote

Hemizygote x Noncarrier

Citation

When using the Nur77^{GFP} mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #016617 in your Materials and Methods section.

Animal Health Reports

[Facility Barrier Level Descriptions](#)

🔴 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(Nr4a1-EGFP/cre)820Khog	\$255.00
	Male	Hemizygous for Tg(Nr4a1-EGFP/cre)820Khog	\$255.00
4 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
5 weeks	Female	Hemizygous for Tg(Nr4a1-EGFP/cre)820Khog	\$255.00
	Male	Hemizygous for Tg(Nr4a1-EGFP/cre)820Khog	\$255.00
5 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
6 weeks	Female	Hemizygous for Tg(Nr4a1-EGFP/cre)820Khog	\$255.00
	Male	Hemizygous for Tg(Nr4a1-EGFP/cre)820Khog	\$255.00
6 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
7 weeks	Female	Hemizygous for Tg(Nr4a1-EGFP/cre)820Khog	\$255.00
	Male	Hemizygous for Tg(Nr4a1-EGFP/cre)820Khog	\$255.00
7 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
8 weeks	Female	Hemizygous for Tg(Nr4a1-EGFP/cre)820Khog	\$255.00
	Male	Hemizygous for Tg(Nr4a1-EGFP/cre)820Khog	\$255.00
8 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
9 weeks	Female	Hemizygous for Tg(Nr4a1-EGFP/cre)820Khog	\$255.00
	Male	Hemizygous for Tg(Nr4a1-EGFP/cre)820Khog	\$255.00
9 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51

10 weeks	SEX	Hemizygous for Tg(Nr4a1-EGFP/cre)820Khog	\$255.00
	Male	Hemizygous for Tg(Nr4a1-EGFP/cre)820Khog	\$255.00
10 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
11 weeks	Female	Hemizygous for Tg(Nr4a1-EGFP/cre)820Khog	\$255.00
	Male	Hemizygous for Tg(Nr4a1-EGFP/cre)820Khog	\$255.00
11 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
12 weeks	Female	Hemizygous for Tg(Nr4a1-EGFP/cre)820Khog	\$255.00
	Male	Hemizygous for Tg(Nr4a1-EGFP/cre)820Khog	\$255.00
12 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51

BREEDER PAIR		
SEX	GENOTYPE	PRICE
Female	Hemizygous for Tg(Nr4a1-EGFP/cre)820Khog	\$333.51
Male	Noncarrier	
Female	Noncarrier	\$333.51
Male	Hemizygous for Tg(Nr4a1-EGFP/cre)820Khog	

RELATED PRODUCTS AND SERVICES		
Frozen Mouse Embryo	C57BL/6-Tg(Nr4a1-EGFP/cre)820Khog/J Frozen Embryos	\$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](#)

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.](#)

LICENSING INFORMATION

Phone: 207-288-6470

Email: TechTran@jax.org

Related Strains

All

By Allele

By Gene

By Collection





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](#) [LEGAL INFORMATION](#)

[RESEARCH CENTERS](#) [MOUSE GENOME INFORMATICS](#)

[MOUSE PHENOME DATABASE](#)

Leading the search for

TOMORROW'S CURES



©2021 THE JACKSON LABORATORY

Choose other country or region

[^](#) [E](#) [E](#) [E](#) [D](#) [B](#)

Did you find what you were looking for?

Yes No