The Jackson Laboratory

NOD.FVB-Tg(Igh-6-Cd80)1Gjf/JbsJ

Stock No: **007769**

Congenic, 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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and is commonly referred to as NOD.B7-1B Tg. The donating investigator reports that this diabetes resistant strain expresses high levels of the transgene on B cells, but not on T-cells. Circulating, speenic, and bone marrow B cells are significantly reduced. This strain may be used to study autoreactive T cell activation, B cell deletion and the role of B7 co stimulatory molecules in autoimmunity, specifically Type 1 Diabetes.

Donating Investigator

Dr. Jeffrey A. Bluestone, University of California, San Francisco

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GENETIC OVERVIEW

Genetic Background **Generation**

Tg(Igh-6-Cd80)1Gjf

Allele Type

Transgenic (Inserted expressed sequence)

VIEW GENETICS

RESEARCH APPLICATIONS

Immunology, Inflammation and Autoimmunity Research
Research Tools
Diabetes and Obesity Research

VIEW ALL RESEARCH APPLICATIO

BASE PRICE

Starting at:

$2,854.50 Domestic price Cryo Recovery

VIEW PRICE LIST

Details

Detailed Description

Transgenic mice are viable, fertile, normal in size, normoglycemic and do not display any gross physical or behavioral abnormalities. High levels of the transgene are expressed on B cells, but not on T cells. At 30 weeks of age transgenic mice are diabetes resistant and insulitis was significantly reduced when compared with wildtype NOD controls. When compared to wildtype NOD controls, the circulating B cells in congenic NOD transgenic mice is 2-3 fold lower in 2 week old mice and 10 fold lower in 5-6 week old mice and persists throughout life. Significantly reduced percentage of B cells were found in the spleen and bone marrow. Analysis of bone marrow shows the more mature B cell subsets (B220+, IgM+) are affected. Elisa tests indicate reduced circulating levels of all Ig types, *Ighm* (formerly Igh-6), *Igh-3* (IgG2b), and *Ighg1* (IgG1) in the serum of transgenic mice. MHC class II expression of splenic B cells was significantly increased by more than 2 fold, indicating features of an activated B cell phenotype, in NOD-$H2^{g7}$ transgenic mice when compared to NOD wildtype and NOD.-$H2^{b}$ transgenic mice.

In 2008, a spontaneous mutation to dystonia (*Dst*) was observed in this colony and may be segregating in cryopreserved stock.

This strain may be used to study autoreactive T cell activation and B cell deletion and the role of B7 costimulatory molecules in autoimmunity, specifically Type 1 Diabetes.

Development

Expression Data

Control Suggestions

Selected References

Genetics

Tg(Igh-6-Cd80)1Gjf

Disease/Phenotype

Disease Terms

Research Areas By Phenotype

Mammalian Phenotype Terms by Genotype

References

Technical Support

CONTACT TECHNICAL SUPPORT

Genotyping Protocols
Genotyping resources and troubleshooting

Appearance
albino
Related Genotype: *A/A Tyr^{c} /Tyr^{c}*

Citation
When using the NOD.FVB-Tg(Igh-6-Cd80)1Gjf/JbsJ mouse strain in a publication, please cite the originating article(s) and include JAX stock #007769 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	Hemizygous or non-carrier for Tg(Igh-6-Cd80)1Gjf/JbsJ	$2,854.50

RELATED PRODUCTS AND SERVICES

Frozen Mouse Embryo	NOD.FVB-Tg(Igh-6-Cd80)1Gjf/JbsJ 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

TERMS OF USE

General Terms and Conditions

QUESTIONS ABOUT TERMS OF USE

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

Leading the search for

TOMORROW'S CURES

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