



B6.Cg-Tg(Ins2-NP)25-3Olds/MhvJ

Stock No: 004826 | B6.RIP NP

 Congenic, Transgenic



CRYO RECOVERY

P L A C E O R D E R

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

Overview

Also Known As: B6.RIP NP

These B6.RIP NP mice express a transgene containing the nucleoprotein from Armstrong's clone of the lymphocytic choriomeningitis

virus (LCMV), and develop IDDM after challenge with LCMV. B6.RIP NP mice show a faster onset of IDDM than BALB.RIP NP (Stock No. [004827](#)) when challenged with LCMV.

Donating Investigator

Dr. Matthais von Herrath, La Jolla Institute for Allergy and Immun

[R E A D M O R E +](#)

GENETIC OVERVIEW

Genetic Background

Generation

Tg(Ins2-NP)25-3Olds

Allele Type

Transgenic (Inserted expressed sequence)

[V I E W G E N E T I C S](#)

RESEARCH APPLICATIONS

Diabetes and Obesity Research

Research Tools

Immunology, Inflammation and Autoimmunity Research

[V I E W A L L R E S E A R C H A P P L I C A T I O N S](#)

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](#)

Transgenic mice were created with the Lymphocytic choriomeningitis virus (LCMV) nucleoprotein(NP) or glycoprotein(GP) under the control of the rat insulin promoter. Northern blot analysis identifies a 3kb band expected of the transgene and SV40 processing signals in the pancreas (Oldstone et al., 1991). Ins2-NP expression was determined in the pancreas and thymus by RT-PCR (von Herrath et al 1994). Tg(Ins2-NP)25-3Olds untreated mice rarely develop insulin-dependent diabetes mellitus (IDDM). When challenged with LCMV they develop IDDM. The B6.Cg -Tg(Ins2-NP)25-3Olds mice ($H2^b$) exhibit a slower (30-120 days) onset of IDDM than the C.Cg-Tg(Ins2-NP)25-3Olds mice ($H2^d$) (10-21 days) or the B6.Cg -Tg(Ins2-GP) 34-20Olds mice ($H2^b$) (10-14 days)

(Oldstone et al., 1991, Homann et al., 1999). Thymic expression of nucleoprotein has been shown to be responsible for this delayed onset of IDDM. Thymi from newborn B6.Cg-Tg(Ins2-NP)25-30lds transplanted into hosts homozygous for *Prkdc^{scid}* fail to produce a primary CTL response when challenged with LCMV, although thymi transplanted from C.Cg-Tg(Ins2-NP)25-30lds mice mount a response. CD8 T cells are required for IDDM development in both nucleoprotein and glycoprotein transgenic mice, as is interferon gamma. In interferon gamma deficient transgenics stimulated with LCMV, CTLs were present in the pancreas and around the islets of Langerhans, but did not infiltrate the islets. Additionally, nucleoprotein transgenic animals require the presence of CD4 T cells. (von Herrath, et al, 1994 and 1997)

Diabetes can be prevented in the C.B6-Tg(Ins2-NP)25-30lds (*H2^d*) mice after its induction by LCMV infection through oral insulin treatment and this model has proven that bystander suppression of autoaggressive CD8 T cells can occur in the pancreatic draining lymph node (Homann et al., 1999).

A single dose injection of anti CD80, anti CD86 or anti CD80/anti CD86 antibodies does not prevent LCMV induced diabetes in either the NP or GP transgenic mice. LCMV challenged GP transgenic mice are partially protected from diabetes by anti CD80 antibodies and completely protected by anti CD86 or anti CD80/CD86 antibodies injected daily for 14 days. However, LCMV challenged NP transgenic mice have accelerated diabetes onset when treated with anti CD80/CD86 antibodies injected daily for 14 days. LCMV induced diabetes is prevented in NP and GP transgenic mice treated with anti TNFRSF5 when treated within a defined time window. Splenocytes from these protected mice adoptively transferred disease resistance to LCMV- challenged pre diabetic GP transgenic mice. The cells that confer protection express ITGAX5, NK1.1 and DX5. The spleens of anti TNFRSF5 protected mice have an increased population of ITGAX5 expressing cells. When this population of cells is further fractionated into ITGAX5⁺, DX5⁺ cells, the recipient mice acquire protection from diabetes. (Homann et al., 2002)

+ Development

+ Expression Data

+ Control Suggestions

+ Selected References

- Genetics

+ Tg(Ins2-NP)25-30lds

- Disease/Phenotype

+ Disease Terms

+ Research Areas By Genotype

+ Mammalian Phenotype Terms by Genotype

+ References

- Technical Support

C H A T O  F L I N E

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

Separated PCR: [Tg\(Ins2-NP\)25-3Olds](#)

[Genotyping resources and troubleshooting](#)

Appearance

black

Related Genotype: *a/a*

Citation

When using the B6.FIP-NP mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #004826 in your

[Animal Health Reports](#)

[Materials and Methods section](#)

[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	GENOTYPE	PRICE
Cryo Recovery	Hemizygous or Non carrier for Tg(Ins2-NP)25-3Olds	\$2,854.50

We will fulfill your order by providing at least two carriers for each strain ordered. The total number, sex, and genotypes provided will vary, although typically 8 or more animals are provided. Please check genotypes which will be recovered. While the genotypes of all animals produced will be communicated to you prior to scheduling shipment, the genotypes of animals provided may not reflect the mating scheme and genotypes described in the strain description. Animals are typically ready to ship in 11-14 weeks. If a second recovery is required to produce the minimum number of animals, then delivery time would increase to approximately 25 weeks. If we fail to produce animals of the correct genotype, you will not be charged. We cannot guarantee the reproductive success of mice shipped to your facility. If the mice are lost after the first three days (post-arrival) or do not produce progeny at your facility, a new order and fee will be necessary.

Cryorecovery to establish a [Dedicated Supply](#) for greater quantities of mice. Mice recovered can be used to establish a dedicated colony to contractually supply you mice according to your requirements. Price by quotation.

Related Products and Services

Frozen Mouse Embryo	B6.Cg-Tg(Ins2-NP)25-3Olds/MhvJ 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.

← 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

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 