

**B6.Cg-Tnfsf13<sup>tm1Pod</sup>/J**Stock No: **022971** Congenic, Targeted Mutation

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

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

polarizing conditions, and augmented IL-13 and IL-17 production under Th2 polarizing conditions. Data indicates that TNFSF13 plays an important role in the regulation of cytokine production, and that TNFSF13-triggered signals contribute to arthritis.

### Donating Investigator

Eckhard R. Podack, University of Miami

[READ MORE +](#)

## GENETIC OVERVIEW

**Genetic Background****Generation***Tnfsf13<sup>tm1Pod</sup>***Allele Type**

Targeted (Null/Knockout)

**Gene Symbol***Tnfsf13***Gene Name**

tumor necrosis factor (ligand) superfamily, member 13

[VIEW GENETICS](#)

## RESEARCH APPLICATIONS

Cancer Research

Immunology, Inflammation and Autoimmunity Research

[VIEW ALL RESEARCH APPLICATIONS](#)

## 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

*Tnfsf13*, (tumor necrosis factor (ligand) superfamily, member 13; also called APRIL) encodes a proliferation-inducing ligand that shares receptors with B-cell activation factor of the TNF family (BAFF) on B and T cells. Roles of *Tnfsf13* in tumor development, B and T cell immunity and autoimmunity have been reported.

These mice carry a knockout allele of *Tnfsf13*. Homozygous mice show a complete absence of mRNA in splenocytes and are viable and fertile. Homozygous null animals exhibit increased *in vitro* T cell proliferation, enhanced Th2 cytokine production under non-polarizing conditions, and augmented IL-13 and IL-17 production under Th2 polarizing conditions.

Upon immunization with OVA and aluminum potassium sulfate (Alum), homozygous null mice respond with an increased antigen-specific IgG1 response. They also have significantly aggravated lung inflammation compared with wildtype mice in the ovalbumin-induced allergic lung inflammation model.

The incidence of collagen-induced arthritis (CIA) is significantly reduced compared to wildtype mice in parallel with diminished levels of antigen specific IgG2a autoantibody and IL-17 production. Data indicates that TNFSF13 plays an important role in the regulation of cytokine production, and that TNFSF13-triggered signals contribute to arthritis. Blockade of TNFSF13 thus may be a valuable adjunct in the treatment of rheumatoid arthritis (RA).

#### Development

#### Control Suggestions

#### Selected References

### Genetics

#### *Tnfsf13*<sup>tm1Pod</sup>

## – 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: [Tnfsf13](#)

[Genotyping resources and troubleshooting](#)

### Citation

When using the B6.Cg-*Tnfsf13*<sup>tm1Pod</sup>/J mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #022971 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
<a href="#">Cryo Recovery</a>	Heterozygous for Tnfsf13<tm1Pod>	\$2,854.50

## RELATED PRODUCTS AND SERVICES

<a href="#">Frozen Mouse Embryo</a>	B6.Cg-Tnfsf13<tm1Pod>/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](#)

#### 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](mailto: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