

**NOD.129P2(Cg)-*Il10*<sup>tm1Cgn</sup> *Il4*<sup>tm1Cgn</sup> /DvsJ**

Stock No: **004291** | NOD.IL4/10<sup>null</sup>

 Congenic, Targeted Mutation

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

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## Donating Investigator

Dr. David Serreze, The Jackson Laboratory

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## GENETIC OVERVIEW

**Genetic Background**

001289 NOD/ShiLt

**Generation**

*Il4*<sup>tm1Cgn</sup>

**Alele Type**

Targeted (Null/Knockout)

**Gene Symbol**

*Il4*

**Gene Name**

interleukin 4

*Il10*<sup>tm1Cgn</sup>

**Alele Type**

Targeted (Null/Knockout)

**Gene Symbol**

*Il10*

**Gene Name**

interleukin 10

VIEW GENETICS

## RESEARCH APPLICATIONS

Immunology, Inflammation and Autoimmunity Research

Cancer Research

Diabetes and Obesity Research

Hematological Research

## BASE PRICE

Starting at:

\$2,854.50 Domestic price Cryo Recovery

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### Details

#### Detailed Description

Mice homozygous for the *I10* and *I4* targeted mutations are viable and fertile when housed under SPF conditions. NOD/Lt mice deficient for both of these genes develop type 1 diabetes at a rate equivalent to the parental strain. The *I10*<sup>tm1Cgn</sup> mutation also renders this NOD/Lt stock susceptible to colitis (although not as severe as other strains of *I10* deficient mice) when maintained under standard housing conditions.

#### Development

#### Control Suggestions

#### Selected References

### Genetics

#### *I4*<sup>tm1Cgn</sup>

#### *I10*<sup>tm1Cgn</sup>

### Disease/Phenotype

[+ Disease Terms](#)

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[+ Research Areas By Phenotype](#)

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[+ Mammalian Phenotype Terms by Genotype](#)

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[+ References](#)

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## [- 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:Il10](#)

[Standard PCR:Il10](#)

[Genotyping resources and troubleshooting](#)

### Breeding Considerations

This stock was created by Dr. David Serreze, The Jackson Laboratory, Bar Harbor, by intercrossing NOD.129P2(B6)-*Il4*<sup>*tm1Cgn*</sup>/Dvs was crossed with NOD.129P2(Cg)-*Il10*<sup>*tm1Cgn*</sup>/Dvs. An intercross strategy was then employed to fix the targeted mutations to homozygosity. The stock is at the N8 backcross generation, and has been confirmed by genome scan to be homozygous for linkage markers delineating twenty-three previously identified, insulin dependent diabetes susceptibility loci of NOD/Lt origin.

### [Additional Breeding and Husbandry Support](#)

#### Appearance

albino, pink eyed

Related Genotype: *A/A Tyr<sup>c</sup> / Tyr<sup>c</sup>*

#### Citation

When using the NOD.IL4/10<sup>null</sup> mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #004291 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](#)



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## DomesticInternational

Pricing effective for USA, Canada and Mexico shipping destinations

### CRYORECOVERY - DOMESTIC PRICING

SERVICE/PRODUCT	DESCRIPTION	PRICE
Cryo Recovery	Homozygous for Il10<tm1Cgn>, Homozygous for Il4<tm1Cgn>	\$2,854.50

## 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

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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](mailto:TechTran@jax.org)

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By Allele

By Gene

By Collection



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