

NOD.129S6(B6)-Cd4^{tm1K^{knw}}/DvsJ

Stock No: 003090 | NOD.Cd4^{null}

 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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restricted deficit in helper T cell activity and other T cell responses. These NOD Cd4-deficient mice have decreased susceptibility to autoimmune diabetes and thus are diabetes resistant.

Donating Investigator

Dr. David Serreze, The Jackson Laboratory

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GENETIC OVERVIEW

Genetic Background

Generation

Cd4^{tm1K^{knw}}

Allele Type

Gene Symbol

Gene Name

Targeted (Null/Knockout)

Cd4

CD4 antigen

VIEW GENETICS

RESEARCH APPLICATIONS

Diabetes and Obesity 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

The initiation of autoimmune insulin-dependent diabetes mellitus (IDDM) in the NOD mouse model entails MHC class I-restricted CD8 T cell responses against pancreatic beta cell antigens. CD8 T cells require helper functions provided by MHC class II-restricted CD4 T cells to exert their full diabetogenic effects. Mice homozygous for the *Cd4^{tm1Knw}* knock-out have a significant block in CD4⁺ T cell development and show a Class II restricted deficit in helper T cell activity and other T cell responses. These NOD Cd4-deficient mice, therefore, have decreased susceptibility to autoimmune diabetes and thus are diabetes resistant.

Control Suggestions

Genetics

Cd4^{tm1Knw}

Disease/Phenotype

Disease Terms

Research Areas By Phenotype

Mammalian Phenotype Terms by Genotype

References

Technical Support

CONTACT TECHNICAL SUPPORT

Genotyping Protocols

Standard PCR: [Generic Cd4](#)

[Genotyping resources and troubleshooting](#)

Citation

When using the NOD.Cd4^{null} mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #003090 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	Homozygous for Cd4<tm1Knw>, 1 pair minimum	\$2,854.50

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