Overview

Also Known As: CD4 KO

Mice homozygous for the \( Cd4^{tm1Mak} \) targeted mutation have a significant block in CD4\(^{+} \) T-cell development. Cell surface expression of CD4 protein is not detected on thymocytes and lymph node cells from homozygous mice. Homozygous mutant mice also show a Class II restricted deficit in helper T-cell activity and other T-cell responses. This mutant mouse strain may be useful in studies of T cell development, susceptibility to viral infection and inflammation.

Donating Investigator

Dr. Tak Mak, University Health Network/Un of Toronto
Details

Detailed Description

Mice homozygous for the \(Cd4^{tm1Mak}\) targeted mutation have a significant block in CD4\(^+\) T-cell development; 90% of their circulating T-cells are CD8\(^-\). Cell surface expression of CD4 protein is not detected on thymocytes and lymph node cells from homozygous mice. Homozygous mutant mice also show a Class II restricted deficit in helper T-cell activity and other T-cell responses. This mutant mouse strain may be useful in studies of T cell development, susceptibility to viral infection and inflammation.

Development

Control Suggestions

Selected References
Genotyping Protocols
Standard PCR: Generic Cd4
Probe: Generic Cd4 Probe-alternate3
Genotyping resources and troubleshooting

Dietary Information
LabDiet® 5K52 formulation (6% fat)

Breeding Considerations
This strain is a good breeder.
When maintaining a live colony, these mice can be bred as homozygotes. Expected coat color from breeding is black.

Additional Breeding and Husbandry Support
Mating System
Homozygote x homozygote
Appearance
black
Related Genotype: a/a

Citation
When using the CD4 KO mouse strain in a publication, please cite the originating article(s) and include JAX stock #002663 in your Materials and Methods section.

Animal Health Reports
## Facility Barrier Level Descriptions

- **AX29 (Maximum)**

## Pricing & Availability

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### Domestic Pricing effective for USA, Canada and Mexico shipping destinations

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Terms Of Use

TERMS OF USE

General Terms and Conditions

ADDITIONAL USE RESTRICTIONS APPLY

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LICENSING INFORMATION

Phone: 207-288-6470
Email: TechTran@jax.org

Related Strains

All

By Allele

By Gene

By Collection
Did you find what you were looking for?

- Yes
- No