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
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.
**Cd4<sup>tm1Mak</sup>**

### Disease/Phenotype

#### Disease Terms

#### Research Areas By Phenotype

#### Mammalian Phenotype Terms by Genotype

#### References

### Technical Support

**Genotyping Protocols**

**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)
Available Now

Sized to accommodate orders of up to 10 or more with age range. Ask Customer Service for details.

Live Mouse

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