**Overview**

R E A D  MO R E  +

Also Known As: B6-TCRdelta-

Mice harboring this T-cell receptor delta chain (Tcrd) knock-out are deficient in receptor expression in all adult lymphoid and epithelial organs, and these mice may be useful for studying immunology and gamma delta T-cell function.

**Donating Investigator**

IMR Colony, The Jackson Laboratory

**GENETIC OVERVIEW**

**Genetic Background**

000664 C57BL/6J

**Generation**

N14F1

(2019-03-04 00:00:00)

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**Tcrd<sup>tm1Mom</sup>**

**Allele Type**

Targeted (Null/Knockout)

**Gene Symbol**

Tcrd

**Gene Name**

T cell receptor delta chain

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**RESEARCH APPLICATIONS**

**Research Tools**

Immunology, Inflammation and Autoimmunity Research

Diabetes and Obesity Research

Hematological Research

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Mice homozygous for the Tcrd<sup>tm1Mom</sup> targeted mutation are viable and fertile. Gamma delta T-cell receptor expression is deficient in all adult lymphoid and epithelial organs. There is normal development of the alpha beta T-cell lineage. Patterns of CD4<sup>+</sup>CD8<sup>+</sup> and CD4<sup>+</sup>CD8<sup>+</sup> alpha beta T-cells are apparently normal. Mice do not develop inflammatory bowel disease.

Diet-induced obesity in homozygous mice results in a reduction in insulin resistance and liver and skeletal muscle inflammation as compared to C57BL/6J controls fed high fat diet (42% fat). This strain may be useful for studying gamma delta T cells and their role in the proinflammatory response.
Genotyping Protocols
Standard PCR: Generic Neo
Standard PCR: Tcrd

Genotyping resources and troubleshooting

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

Breeding Considerations

This strain is an exceptional breeder. This Tcrd<sup>tm1Mom</sup> strain is maintained by mating homozygous siblings. This strain should be housed under conditions similar to Prkdc<sup>scid</sup>/Prkdc<sup>scid</sup> mice or any other immunodeficient strain. Only homozygous mice may be ordered. Expected coat color from breeding: Black

Additional Breeding and Husbandry Support

Mating System
Homozygote x Homozygote

Appearance
black

Related Genotype: a/a

Citation
When using the B6-TCRdelta- mouse strain in a publication, please cite the originating article(s) and include JAX stock #002120 in your Materials and Methods section.

Animal Health Reports

Facility Barrier Level Descriptions

- AX10 (Standard)

Pricing & Availability

Live mice available in varying quantities. Ask Customer Service for details.

Available Now

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