Overview

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
**Gene Symbol:** Tcrd

**Gene Name:** T cell receptor delta chain

**Allele Type:** Targeted (Null/Knockout)

**Gene Symbol:** Tcrd

**Gene Name:** T cell receptor delta chain

**BASE PRICE**

Starting at: $236.78 Domestic price for female 4-week

**Research Applications**

Research Tools

- Immunology, Inflammation and Autoimmunity Research
- Diabetes and Obesity Research
- Hematological Research

**Details**

**Detailed Description**

Mice homozygous for the Tcrd^{tm1Mom} 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^+CD8^- and CD4^+CD8^+ 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.

**Development**

**Control Suggestions**

**Selected References**

**Genetics**
Genotyping Protocols
Standard PCR: Tcrd<sup>tm1Mom</sup>

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

Available Now

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

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Related Products and Services

| Frozen Mouse Embryo | B6.129P2-Tcrd<sup>tm1Mom</sup>/J | $2595.00 |

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Terms of Use
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