Also Known As: Tcra KO
Mice homozygous mice for the Tcra<sup>tm1Mom</sup> targeted mutation are deficient in the alpha beta T-cell receptor. The thymus is devoid of CD4<sup>+</sup>CD8<sup>+</sup> and CD4<sup>−</sup>CD8<sup>−</sup> cells. Normal numbers of CD4<sup>+</sup>CD8<sup>+</sup> cells are retained without the IL2 receptor. There are normal numbers of CD4<sup>−</sup>CD8<sup>−</sup> cells. Mice may develop inflammatory bowel disease beginning at ~4-6 months of age.

Donating Investigator
IMR Colony, The Jackson Laboratory
Mice homozygous mice for the \( Tcra^{tm1Mom} \) targeted mutation are viable and fertile. They are deficient in the alpha beta T-cell receptor. The thymus is devoid of \( CD4^+CD8^- \) and \( CD4^-CD8^+ \) cells. Normal numbers of \( CD4^-CD8^- \) cells are retained without the IL2 receptor. There are normal numbers of \( CD4^-CD8^- \) cells. ~1% of the thymocytes express the gamma delta TCR. Mice may develop inflammatory bowel disease beginning at ~4-6 months of age.
Genotyping Protocols
Standard PCR: Tcra alternate3
Genotyping resources and troubleshooting

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

Breeding Considerations
This strain is a good breeder.

This Tcra<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: al/a

Citation
When using the Tcra KO mouse strain in a publication, please cite the originating article(s) and include JAX stock #002116 in your Materials and Methods section.

Animal Health Reports
Facility Barrier Level Descriptions
Pricing & Availability

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

Live Mouse

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Phone: 207-288-6470
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