Also Known As: B2m KO
Mice homozygous for the \( B2m^{tm1Unc} \) targeted mutation have little if any MHC class I protein expression on the cell surface. There are few CD8\(^+\) cytotoxic T-cells and under some circumstances a compensatory increase in CD4\(^+\) cytotoxic T-cells. Immune responses involving CD8\(^+\) T-cells are severely deficient, providing a model to assess the role of CD8\(^+\) cells and class I MHC in various experimental systems.

Donating Investigator
Dr. Oliver Smithies, University of North Carolina at Chapel Hill
Beverly H Koller, University of North Carolina at Chapel Hill
Mice homozygous for the $B2m^{tm1Unc}$ targeted mutation have little if any MHC class I protein expression on the cell surface. There are few CD8$^+$ cytotoxic T-cells and under some circumstances a compensatory increase in CD4$^+$ cytotoxic T-cells. Immune responses involving CD8$^+$ T-cells are severely deficient providing a model to assess the role of CD8$^+$ cells and class I MHC in various experimental systems. Hemachromatosis has been noted in certain genetic backgrounds (Rothenberg BE, Voland JR, *Proc Natl Acad Sci USA* 93:1529-34, 1996).

In an attempt to offer alleles on well-characterized or multiple genetic backgrounds, alleles are frequently moved to a genetic background different from that on which an allele was first characterized. This is the case for the strain above. It should be noted that the phenotype could vary from that originally described. We will modify the strain description if necessary as published results become available.
Genetics

*B2m*tm1Unc

Disease/Phenotype

Disease Terms

Research Areas By Phenotype

Mammalian Phenotype Terms by Genotype

References

Technical Support

Genotyping Protocols
Standard PCR: *B2m*

Genotyping resources and troubleshooting

Breeding Considerations

This strain is a good breeder.

This *B2m*tm1Unc strain is maintained by mating homozygous siblings. 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 B2m KO mouse strain in a publication, please cite the originating article(s) and include JAX stock #002087 in your Materials and Methods section.

Animal Health Reports
Facility Barrier Level Descriptions

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Live Mouse

<table>
<thead>
<tr>
<th>AGE</th>
<th>SEX</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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