B6.129S6-Atm<sup>tm1Awb</sup>/J

Stock No: 008536 | ATM<sup>-</sup>

Targeted Mutation, Congenic

Also Known As: ATM<sup>-</sup>

These mice carry a truncation mutation of the Atm, ataxia telangiectasia mutated homolog (human), gene. This mutant mouse strain may be useful in studies of ataxia telangiectasia, neurodevelopment and thymic lymphoma.

Donating Investigator

Michael Weil, Colorado State University

Genetic Background | Generation
--- | ---
N<sup>7</sup>N<sup>2</sup>F<sub>4</sub> | (2017-11-15 00:00:00)

Atm<sup>tm1Awb</sup>

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted (Humanized sequence, Null/Knockout)</td>
<td>Atm</td>
<td>ataxia telangiectasia mutated</td>
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</table>

Cancer Research

Immunology, Inflammation and Autoimmunity Research

Neurobiology Research

Reproductive Biology Research

VIEW GENETICS

VIEW ALL RESEARCH APPLICATIONS
## Details

### Detailed Description

Mice homozygous for this targeted mutation display many of the characteristics of ataxia telangiectasia, including growth retardation, neurologic dysfunction, infertility, defects in T lymphocyte maturation, and extreme sensitivity to gamma-irradiation. Most homozygotes develop thymic lymphoma. Homozygotes are infertile. Heterozygous mice display no abnormalities through eight months of age and are more sensitive to ionizing radiation than wildtype mice. Fewer than expected homozygotes are produced from heterozygote X heterozygote crosses. This mutant mouse strain may be useful in studies of ataxia telangiectasia, neurodevelopment and thymic lymphoma.

This mutation was originally characterized on the 129S6/SvEvTac background. 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.

**Importation of this model was supported by the A-T Children’s Project.**

## Development

## Control Suggestions

## Selected References

## Genetics

### Atm<sup>lmt1&nb</sup>

## Disease/Phenotype

## Disease Terms

## Research Areas By Genotype

## Mammalian Phenotype Terms by Genotype

## References

## Technical Support
Genotyping Protocols
Melt Curve Analysis: Atm\textsuperscript{tm1Awb}
Standard PCR: Atm\textsuperscript{tm1Awb}
Genotyping resources and troubleshooting

Dietary Information
New Diet as of March 2015: Lab Diet\textsuperscript{®} 5K0Q (6% fat)

Breeding Considerations
When maintaining a live colony, heterozygous mice may be bred together, to wildtype siblings, or to C57BL/6J inbred mice (Stock No. 000664). Homozygotes are infertile. Fewer than expected homozygotes are produced from heterozygote X heterozygote crosses.
Additional Breeding and Husbandry Support

Mating System
Heterozygote x Wild-type
Wild-type x Heterozygote

Animal Health Reports
Facility Barrier Level Descriptions

AX10 (Standard)

Pricing & Availability
3–6 week average lead time depending on quantity and age requests are not accepted

Domestic
International
Pricing effective for USA, Canada and Mexico shipping destinations

### Live Mouse

<table>
<thead>
<tr>
<th>AGE</th>
<th>SEX</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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<tr>
<td>Approx 4-8 weeks</td>
<td>Female</td>
<td>Heterozygous for Atm\textsuperscript{tm1Awb}</td>
<td>$271.00</td>
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<tr>
<td></td>
<td>Male</td>
<td>Heterozygous for Atm\textsuperscript{tm1Awb}</td>
<td>$271.00</td>
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### Breeder Pair

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<td>Female</td>
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<tr>
<td>Male</td>
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Related Strains

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</table>

All Related Strains
Leading the search for
TOMORROW'S CURES