These mutant mice possess an engineered duplication of a region of mouse Chromosome 7 that shares conserved synteny with the Autism spectrum disorders interval on human Chromosome 16. They may be useful in studying Autism and other associated disorders.

Donating Investigator
Dr. Alea A. Mills, Cold Spring Harbor Laboratory

**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dp(7Slx1b-Sept1)5Aam</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted (Not Applicable)</td>
<td>Dp(7Slx1b-Sept1)5Aam</td>
<td>duplication, Chr 7, Alea A Mills 5</td>
</tr>
</tbody>
</table>

**RESEARCH APPLICATIONS**

Neurobiology Research
Mouse/Human Gene Homologs
These mutant mice possess an engineered duplication of approximately 0.39 Mb of mouse Chromosome 7. The region involved encompasses a chromosomal segment, between the GIY-YIG domain containing 2 (Giyd2) gene and the septin 1 (Sept1) loci, that shares conserved synteny with Autism spectrum disorders (ASD) critical interval on human Chromosome 16, specifically the 16p11.2 region. Homozygous mutant mice are viable and fertile. These mice exhibit neuroanatomical and behavioral phenotypes. This mutant mouse may be useful in studying Autism and other associated disorders.

(Mice bearing the reciprocal deficiency mutation are also available (see Stock No. 013128)

_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._

**Development**

**Control Suggestions**

**Selected References**

**Genetics**

_Dp(7Slx1b-Sept1)5Aam_

**Disease/Phenotype**
Genotyping Protocols
Separated PCR: Dp(7Slx1b-Sept1)5Aam
Genotyping resources and troubleshooting

Breeding Considerations

Hemizygous mice were backcrossed to C57BL/6J inbred mice using a marker-assisted, speed congenic approach for many generations to establish this congenic strain. When maintaining the live congenic colony, hemizygous mice may be bred together, to wildtype (non-duplication) mice from the colony, or to C57BL/6J inbred mice.

Additional Breeding and Husbandry Support

Citation
When using the B6.127S7-Dp(7Slx1b-Sept1)5Aam/J mouse strain in a publication, please cite the originating article(s) and include JAX stock #016915 in your Materials and Methods section.

Animal Health Reports
Facility Barrier Level Descriptions

Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, G200

Pricing & Availability

Cryo Recovery

Typically mice are recovered in 10-14 weeks. Contact Customer Service to place an order or for more information.
**CRYORECOVERY - DOMESTIC PRICING**

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heterozygous or wildtype for Dp(7Slx1b-Sept1)5Aam/J</td>
<td>$2,854.50</td>
</tr>
</tbody>
</table>

**RELATED PRODUCTS AND SERVICES**

<table>
<thead>
<tr>
<th>SERVICE/PRODUCT</th>
<th>DESCRIPTION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frozen Mouse Embryo</td>
<td>B6.127S7-Dp(7Slx1b-Sept1)5Aam/J</td>
<td>$2,595.00</td>
</tr>
</tbody>
</table>

**PAYMENT TERMS AND CONDITIONS**

Terms are granted by individual review and stated on the customer invoice(s) and account statement. These transactions are payable in U.S. currency within the granted terms. Payment for services, products, shipping containers, and shipping costs that are rendered are expected within the payment terms indicated on the invoice or stated by contract. Invoices and account balances in arrears of stated terms may result in The Jackson Laboratory pursuing collection activities including but not limited to outside agencies and court filings.

**THE JACKSON LABORATORY'S GENOTYPE PROMISE**

The Jackson Laboratory has rigorous genetic quality control and mutant gene genotyping programs to ensure the genetic background of JAX® Mice strains as well as the genotypes of strains with identified molecular mutations. JAX® Mice strains are only made available to researchers after meeting our standards. However, the phenotype of each strain may not be fully characterized and/or captured in the strain data sheets. Therefore, we cannot guarantee a strain's phenotype will meet all expectations. To ensure that JAX® Mice will meet the needs of individual research projects or when requesting a strain that is new to your research, we suggest ordering and performing tests on a small number of mice to determine suitability for your particular project. We do not guarantee breeding performance and therefore suggest that investigators order more than one breeding pair to avoid delays in their research.

**TERMS OF USE**

General Terms and Conditions

**ADDITIONAL USE RESTRICTIONS APPLY**

Use of MICE by companies or for-profit entities requires a license.

**LICENSING INFORMATION**

Phone: 207-288-6470  
Email: TechTran@jax.org
## Related Strains

<table>
<thead>
<tr>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
</tr>
<tr>
<td>By Allele</td>
</tr>
<tr>
<td>By Gene</td>
</tr>
<tr>
<td>By Collection</td>
</tr>
</tbody>
</table>