**Overview**

Also Known As: defective lipopolysaccharide response, 2J

Due to demand and low productivity, this colony is being expanded. An estimated distribution date is provided above.

The *Tlr4*<sup>lps-2J</sup> mutation that occurred in the BXD29 RI strain is characterized by large nodular bilateral subcortical heterotopias with partial callosal agenesis, and exhibit a defect in rapid auditory processing.

**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>164p+7</td>
<td>(2019-10-04 00:00:00)</td>
</tr>
</tbody>
</table>
The BXD RI strains are used to study the genetics of behavioral phenotypes including alcohol and drug addiction, stress, and locomotor activity. The BXD set of RI strains also is used in the genetic analysis of numerous complex or potentially complex physiologic phenotypes including differences in organ weight and bone mineral density. The strain distribution pattern (SDP) for BXD RI strains is available through the Mouse Genome Informatics Recombinant Inbred Strain Distribution Patterns. This subline of BXD29/Ty is homozygous for the mutation defective lipopolysaccharide response 2 Jackson, which arose spontaneously in the parental strain. The non-mutant parental strain is available as stock number 010981.

In 2011, a spontaneous mutation, telencephalon midline malformation (*tmm*), was observed in the BXD29-*Tlr4*<sup>ps-2J</sup> strain (Rosen G et al, Cereb Cortex 2012 March 27). The mutation is 100% penetrant on this genetic background and is characterized by large nodular bilateral subcortical heterotopias with partial callosal agenesis. Mice perform similar to wild-type in tests for motor...
coordination (rotarod) and learning/memory (water maze), but exhibit a defect in rapid auditory processing.

Genetics

- Tlr4<sup>Δps-2J</sup>
- Myo5a<sup>d</sup>
- tmm

Disease/Phenotype

- Disease Terms
- Research Areas By Phenotype
- Mammalian Phenotype Terms by Genotype
- Phenotype Information
- References

Technical Support

Genotyping Protocols
Genotyping resources and troubleshooting
Dietary Information
LabDiet® 5K52 formulation (6% fat)

Mating System
Sibling x Sibling
Appearance
steel grey
Related Genotype: *a/a Tyrp<sup>Tyrp<sup>1</sup>*/<sup>Tyrp</sup>1<sup>+</sup> Myo5a<sup>d</sup>/Myo5a<sup>d</sup>
Citation
When using the defective lipopolysaccharide response, 2J mouse strain in a publication, please cite the originating article(s) and include JAX stock #000029 in your Materials and Methods section.

Pricing & Availability
Live mice available in varying quantities. Ask Customer Service for details.

Available

Live Mouse
<table>
<thead>
<tr>
<th>AGE</th>
<th>SEX</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approx 4-8 weeks</td>
<td>Female</td>
<td>$139.90</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>$139.90</td>
</tr>
</tbody>
</table>

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Related Products and Services
Frozen Mouse Embryo BXD29-Tlr4<lps-2J>/J Frozen Embryos $2595.00
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