B6Ros.Cg-Dmd<sup>mdx-4Cv/J</sup>

Stock No: 002378 | X linked muscular dystrophy 4

- Chemically Induced Mutation, Congenic

Also Known As: X linked muscular dystrophy 4

This spontaneous mutation of Dmd is one several Dmd<sup>mdx</sup> revertants and exhibits muscle fiber necrosis, fibrosis and centrally nucleated skeletal muscle fibers. This allele has 10-fold fewer revertants than mdx-2Cv and mdx-3Cv and may be useful in studies of muscular dystrophy.

Donating Investigator

Dr. Verne M. Chapman (deceased), Roswell Park Memorial Institute

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**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>N12F17pF16</td>
<td>(2018-04-02 00:00:00)</td>
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</table>

<table>
<thead>
<tr>
<th>Dmd&lt;sup&gt;mdx-4Cv&lt;/sup&gt;</th>
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</thead>
<tbody>
<tr>
<td>Allele Type</td>
</tr>
<tr>
<td>Chemically induced (ENU)</td>
</tr>
<tr>
<td>Gene Symbol</td>
</tr>
<tr>
<td>Dmd</td>
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<tr>
<td>Gene Name</td>
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<td>dystrophin, muscular dystrophy</td>
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**RESEARCH APPLICATIONS**

Mouse/Human Gene Homologs

Neurobiology Research

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**BASE PRICE**
Details

Detailed Description

The Dmd<sup>mdx 4Cv</sup> and Dmd<sup>mdx 5Cv</sup> strains have 10 times fewer revertants than the Dmd<sup>mdx</sup> and Dmd<sup>mdx 2Cv</sup> strains as viewed in quadriceps cross-sections. This is not attributable to genetic background or viral infections. These reversion rate differences may be attributable to differences in the location of the point mutation. The large number of revertants in Dmd<sup>mdx</sup> mutants has complicated the analysis of gene or cell therapies. These mutants are more useful for this purpose. All these strains are also hemizygous for Hprt<sup>a</sup> and Pgk1<sup>a</sup> (both are on the X chromosome).

Development

Control Suggestions

Selected References

Genetics

Dmd<sup>mdx 4Cv</sup>

Disease/Phenotype

Disease Terms

Research Areas By Genotype

Mammalian Phenotype Terms by Genotype

References

Technical Support
Genotyping Protocols
Pyrosequencing: $Dmd^{mdx-4Cv}$
End Point Analysis: $Dmd^{mdx-4Cv}$ EP Alternate1
Genotyping resources and troubleshooting

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

Breeding Considerations
This strain is maintained by mating homozygous females to hemizygous males (X-linked).
Additional Breeding and Husbandry Support

Mating System
Homozygote x Hemizygote

Citation
When using the X-linked muscular dystrophy 4 mouse strain in a publication, please cite the originating article(s) and include JAX stock #002378 in your Materials and Methods section.
Facility Barrier Level Descriptions
AX11 (Maximum)

Pricing & Availability

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

<table>
<thead>
<tr>
<th>AGE</th>
<th>SEX</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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</thead>
<tbody>
<tr>
<td>Approx 4-8 weeks</td>
<td>Female</td>
<td>Homozygous for $Dmd^{mdx-4Cv}$</td>
<td>$231.00</td>
</tr>
<tr>
<td>Approx 4-8 weeks</td>
<td>Male</td>
<td>Hemizygous for $Dmd^{mdx-4Cv}$</td>
<td>$231.00</td>
</tr>
</tbody>
</table>

Related Products and Services

Frozen Mouse Embryo $2,595.00 per straw or vial

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Email: TechTran@jax.org

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