FVB.129P2-Abcb4\textsuperscript{tm1Bor}/J

Stock No: 002539 | MDR2 KO

Congenic, Targeted Mutation

AVAILABLE FOR PRE-ORDER

PRE-ORDER NOW

Estimated to begin distribution on: Dec 10, 2018

Also Known As: MDR2 KO

MDR2 KO (Abcb4 or ATP-binding cassette, sub-family B (MDR/TAP), member 4) mice fail to secrete phospholipid into the bile from the liver. Mice develop portal inflammation followed by hepatocellular carcinoma. This strain may be useful in studies of intrahepatic cholestasis and liver cancer.

Donating Investigator

Dr. Piet Borst, The Netherlands Cancer Institute

READ MORE +

GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
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<tbody>
<tr>
<td>N10+pN1</td>
<td>(2018-03-21 00:00:00)</td>
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<table>
<thead>
<tr>
<th>Abcb4\textsuperscript{tm1Bor}</th>
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<tbody>
<tr>
<td>Allele Type</td>
</tr>
<tr>
<td>Targeted (Null/Knockout)</td>
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</tbody>
</table>

VIEW GENETICS

RESEARCH APPLICATIONS

Cancer Research
Metabolism Research
Internal/Organ Research
Research Tools

VIEW ALL RESEARCH APPLICATIONS
Details

Important Note
This strain is homozygous for the retinal degeneration allele Pde6b<sup>rd1</sup>.

Detailed Description
The Abcb4 (ATP-binding cassette, sub-family B (MDR/TAP), member 4) or MDR2 gene encodes a membrane protein that functions as a transporter using phosphatidylcholine as its substrate. MDR2 knock-out (KO) mice lack the ability to secrete phospholipid into the bile from the liver. They develop a degenerative liver disease. Portal inflammation ensues at an early age followed by hepatocellular carcinoma development after the age of 1 year. Bile from heterozygous mice has half the level of phospholipid when compared to bile from homozygotes. No liver pathology has been shown in heterozygotes. This strain may be useful in studies of intrahepatic cholestasis and liver cancer.

Development

Control Suggestions

Selected References

Genetics

Abcb4<sup>lmtbor</sup>

Disease/Phenotype

Disease Terms

Research Areas By Genotype

Mammalian Phenotype Terms by Genotype

References

Technical Support
Genotyping Protocols
MELT: Abcb4<sup>tm13or</sup> alternate<sup>1</sup>
Genotyping resources and troubleshooting

Breeding Considerations
The strain is maintained by mating homozygous siblings. Please note that liver degeneration begins to arise at about 8 months of age.
Additional Breeding and Husbandry Support

Appearance
albino
Related Genotype: Tyr<sup>C</sup>/Tyr<sup>C</sup>

Citation
If publishing your research using this mouse strain in a publication, please cite the originating article(s) and include JAX stock #002539 in your Materials and Methods section.
Facility Barrier Level Descriptions

 AX18 (Maximum)

Pricing & Availability

Available for Pre-order

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<table>
<thead>
<tr>
<th>AGE</th>
<th>SEX</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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<tbody>
<tr>
<td>Approx 4-8 weeks</td>
<td>Female</td>
<td>Homozygous for Abcb4&lt;sup&gt;tm13or&lt;/sup&gt;</td>
<td>$255.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Abcb4&lt;sup&gt;tm18or&lt;/sup&gt;</td>
<td>$255.00</td>
</tr>
</tbody>
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