B6.129S6(Cg)-Cdkn1a<sup>tm1Led</sup>/J

Stock No: 016565 | p21<sup>CIP1/WAF1</sup>

Congenic, Targeted Mutation

Also Known As: p21<sup>CIP1/WAF1</sup>

These cyclin-dependent kinase inhibitor 1A (Cdkn1a or p21<sup>CIP1/WAF1</sup>) knock-out mice may be useful for studying cell cycle timing and arrest during cellular proliferation.

Donating Investigator

Michael O'Reilly, The University of Rochester

Genetic Overview

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N10×N1F3</td>
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<td>(2018-04-16 00:00:00)</td>
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</tbody>
</table>

**Cdkn1a<sup>tm1Led</sup>**

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
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</thead>
<tbody>
<tr>
<td>Targeted (Null/Knockout)</td>
<td>Cdkn1a</td>
<td>cyclin-dependent kinase inhibitor 1A (P21)</td>
</tr>
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Research Applications

Cancer Research
Cardiovascular Research
Cell Biology Research

Base Price
Starting at:
$255.00 Domestic price for female

Details

Detailed Description
In this knockout strain, a neo cassette replaces exon 2 of the of the cyclin-dependent kinase inhibitor 1A (Cdkn1a or p21<sup>CIP1/WAF1</sup>) gene. Homozygotes are viable, fertile, and normal in size. P21<sup>CIP1/WAF1</sup> is expressed, in a p53-dependent manner, during embryogenesis and postnatal development primarily in dividing cells. Although, actively dividing cells in these mice do not arrest in G1 phase of the cell cycle in response to DNA damage, these mice do not develop tumors as mice deficient in p53 do. These mice may be useful for studying cell cycle timing and arrest during cellular proliferation.

Development

Control Suggestions

Selected References

Genetics

Cdkn1a<sup>Im1Led</sup>

Disease/Phenotype

Disease Terms

Research Areas By Genotype

Mammalian Phenotype Terms by Genotype

References

Technical Support

Genotyping Protocols
Standard PCR: Cdkn1a<sup>Im1Led</sup>
Genotyping resources and troubleshooting
Dietary Information
LabDiet® 5K52 formulation (6% fat)

Breeding Considerations
When maintaining a live colony, homozygous mice may be bred together.

Additional Breeding and Husbandry Support

Mating System
Homozygote x Homozygote

Citation
When using this strain in your research, please cite the originating article(s) and include JAX stock #016565 in your Materials and Methods section.

Facility Barrier Level Descriptions
FGB29 (Standard)

Pricing & Availability

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

Repository Live

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

<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 Cdkn1a&lt;sup&gt;tm1Led&lt;/sup&gt;</td>
<td>$255.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Cdkn1a&lt;sup&gt;tm1Led&lt;/sup&gt;</td>
<td>$255.00</td>
</tr>
</tbody>
</table>

Related Products and Services
Frozen Mouse Embryo $2,595.00 per straw or vial

Payment Terms and Conditions
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