C57BL/6J-Adora2a tm1.Jfc/J

Stock No: 010685 | A2A KO

Targeted Mutation

Available

Place Order

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

Overview

Also Known As: A2A KO, A2AAR-, A2aR-, A2AR KO

Mice that are homozygous for this knockout of the Adora2a gene, are resistant to experimentally induced ischemic brain injury and exhibit increased resistance to the addictive substances amphetamine and cocaine.

Donating Investigator

Joel Linden, University of Virginia

READ MORE +
Adora2a<sup>tm1Jfc</sup>

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<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
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<td>Targeted (Null/ Knockout)</td>
<td>Adora2a</td>
<td>adenosine A2a receptor</td>
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RESEARCH APPLICATIONS
Research Tools
Cardiovascular Research
Neurobiology Research
Immunology, Inflammation and Autoimmunity Research

BASE PRICE
Starting at:

$278.00 Domestic price for female 4-week

Details

Detailed Description

Mice that are homozygous for the targeted mutation are viable, fertile, normal in size and do not display any gross physical or behavioral abnormalities. No functional gene product (protein) is detected by receptor autoradiography analysis of the brain. Experimentally induced cerebral infarction volume and resulting neurological function impairment are reduced in homozygotes. Treatment with receptor agonist, CGS 21680, does not elicit decreased locomotor activity in homozygotes, as compared to wildtype. Homozygotes have reduced spontaneous activity and increased resistance to the addictive substances amphetamine and cocaine. This mutant mouse strain may be useful in studies of behavior, ischemic brain injury, stroke, responses to addictive substances and T cell response to inflammation.

Development

Control Suggestions

Selected References

Genetics
Genotyping Protocols
Standard PCR: Adora2a^{tm1Jlc}
Genotyping resources and troubleshooting

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

Breeding Considerations
When maintaining a live colony, these mice can be bred as homozygotes.
Additional Breeding and Husbandry Support

Mating System
Homozygote x Homeozygote

Citation
When using the Adora2a^{tm1Jlc} mouse strain in a publication, please cite the originating article(s) and include JAX stock #010685 in your Materials and Methods section.

Animal Health Reports
- Facility Barrier Level Descriptions
  - AX10 (Standard)

Pricing & Availability
Live mice available in varying quantities. Ask Customer Service for details.
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**Related Products and Services**

- Frozen Mouse Embryo: $2,595.00 per straw or vial

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**Terms of Use**

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Email: TechTran@jax.org

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