STOCK Agrp<sup>tm1(cre)Low</sup>/J

Stock No: 012899 | Agrp-Ires-cre

Targeted Mutation

REPONRY LIVE

PLACE ORDER

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

Also Known As: Agrp-Ires-cre

Mutant Agrp<sup>tm1(cre)Low</sup>/ mice have IRES-Cre inserted in exon 3 of the agouti related protein, Agrp. Cre recombinase expression is observed in agouti-related protein secreting neurons. These mice may be useful for studying the physiological functions of GABA neurotransmission in agouti-related protein neurons in the hypothalamus.

Donating Investigator

Bradford B. Lowell, Beth Israel Deaconess Med Cntr (Harvard)

GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F7 x F15</td>
</tr>
<tr>
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<td>(2017-11-17 00:00:00)</td>
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</tbody>
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**Agrp<sup>tm1(cre)Low</sup>**

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
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<tbody>
<tr>
<td>Targeted (Recombinase-expressing)</td>
<td>Agrp</td>
<td>agouti related neuropeptide</td>
</tr>
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</table>

VIEW GENETICS

RESEARCH APPLICATIONS

Neurobiology Research

VIEW ALL RESEARCH APPLICATIONS

BASE PRICE
Details

Detailed Description
Mice homozygous for the Agrp\textsuperscript{tm1[cre]lowl} allele are viable and fertile, with IRES-Cre inserted in exon 3 of the agouti related protein, Agrp. As such, Cre expression is directed by the endogenous promoter/enhancer regions. Specifically, Cre recombinase expression is observed in agouti-related protein (AgRP) secreting neurons. When bred with mice containing a loxP-flanked sequence of interest, Cre-mediated recombination will result in deletion of the floxed sequence(s) in the offspring. These mice may be useful for studying the physiological functions of GABA neurotransmission in AgRP neurons in the hypothalamus.

When AgRP-IRES-Cre mice are bred to have Cre-inducible channelrhodopsin/EYFP expression (e.g., Ai32 [Stock Nos. 012569/024109]), the resulting double mutant animals allow manipulation of AgRP-expressing neuron dynamics (sensory and post-ingestive signals) in response to caloric food and/or experimental compound consumption [Su, Alhadeff and Betley 2017 Cell. Rep. 21:2724].

Development

Expression Data

Control Suggestions

Selected References

Genetics

Agrp\textsuperscript{tm1[cre]lowl}

Disease/Phenotype

Disease Terms

Research Areas By Genotype

Mammalian Phenotype Terms by Genotype

References

Technical Support
Genotyping Protocols
QPCR: Generic Cre Quantitative PCR
Separated PCR: Agrp^{tm1creLoxP}\textit{L}
Probe: Generic Cre Probe
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 mouse strain in a publication, please cite the originating article(s) and include JAX stock #012899 in your Materials and Methods section.

Facility Barrier Level Descriptions
• AX10 (Standard)

Pricing & Availability

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

| 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 Agrp^{tm1creLoxP}\textit{L}</td>
<td>$255.00</td>
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<tr>
<td>Male</td>
<td>Homozygous for Agrp^{tm1creLoxP}\textit{L}</td>
<td>$255.00</td>
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Related Products and Services
Frozen Mouse Embryo | $2,595.00 per straw or vial

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Related Strains

- All
- By Allele
- By Gene
- By Collection

All Related Strains
Leading the search for
TOMORROW'S CURES