Overview

The mouse pro-opiomelanocortin-alpha (Pomc) promoter drives expression of cre primarily in the granule cells of the dentate gyrus subregion of the hippocampus.

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>N13+N1F5</td>
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<td>(2018-12-11 00:00:00)</td>
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</table>

**Tg(Pomc-cre)1Lowl**

**Allele Type**
Transgenic (Recombinase-expressing)

RESEARCH APPLICATIONS

Research Tools
Neurobiology Research

BASE PRICE

Starting at:

- $76.22 Domestic price for female
- $347.22 Domestic price for breeder pair

Details

**Detailed Description**

In this strain, the mouse pro-opiomelanocortin-alpha (Pomc) promoter drives expression of cre in the central nervous system, primarily the hippocampus. Cre expression is strongest and most restricted to the granule cells of the dentate gyrus subregion. Weaker, scattered expression can also be detected in other regions including the arcuate nucleus of the hypothalamus and the habenular nucleus. When crossed with a strain carrying a loxP-flanked genomic segment of interest, tissue-specific excision of that segment may be achieved.

In POMC-cre and loxP-flanked (flexed) strain intercrosses, using male cre animals is recommended. According to the donating investigator, passing the cre through the female germline can result in a high percentage of offspring that carry the recombined allele in all of their tissues. Such “leaky” Cre expression is reported in male POMC-cre mice also, but at a lower frequency (< 5%). The frequency of “leaky” expression in male POMC-cre mice, however, increases with the animal’s age.

**Development**

VIEW GENETICS

VIEW ALL RESEARCH APPLICATIONS

VIEW PRICE LIST
Genotyping Protocols
Standard PCR: Generic Cre
Genotyping resources and troubleshooting

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

Breeding Considerations
Although homozygotes are viable and fertile, when maintaining a live colony it is recommended that hemizygous males be bred to C57BL/6 (wildtype) females. In POMC-cre and loxP-flanked (floxed) strain intercrosses, using male cre animals is recommended. According to the donating investigator, passing the cre through the female germline can result in a high percentage of offspring that carry the recombined allele in all of their tissues. Such “leaky” Cre expression is reported in male POMC-cre mice also, but at a lower frequency (< 5%). The frequency of “leaky” expression in male POMC-cre mice, however, increases with the animal’s age.

Additional Breeding and Husbandry Support

Mating System
Noncarrier x Hemizygote

Citation
When using the B6.129-Pomc-cre1Lowl/J mouse strain in a publication, please cite the originating article(s) and include JAX stock #010714 in your Materials and Methods section.

Facility Barrier Level Descriptions
### Pricing & Availability

*3–6 week lead time for most orders depending on quantity and age range requested*

#### Domestic | International

Pricing effective for USA, Canada and Mexico shipping destinations

<table>
<thead>
<tr>
<th>Live Mouse</th>
<th>AGE</th>
<th>SEX</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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<td>Approx 4-8 weeks</td>
<td>Female</td>
<td>Hemizygous for Tg(Pomc-cre)1Lowl</td>
<td>$271.00</td>
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<td>Noncarrier</td>
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<table>
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<tr>
<th>Breeder Pair</th>
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</tbody>
</table>

#### 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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## Related Strains

**All**

**By Allele**

**By Gene**

**By Collection**

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*All Related Strains*

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