Also Known As: mPer2^{Luc}

These targeted reporter mutant mice express PER2::LUC bioluminescence similar to endogenous Per2 expression, and may be useful as a real-time reporter of circadian dynamics in different tissues.

Donating Investigator

Dr. Joseph S. Takahashi, Univ Texas Southwestern Medical Ctr
**Per2<sup>tm1Jt</sup>**

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
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<tbody>
<tr>
<td>Targeted (Reporter, No functional change)</td>
<td>Per2</td>
<td>period circadian clock 2</td>
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**RESEARCH APPLICATIONS**

Research Tools
Neurobiology Research

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**BASE PRICE**

Starting at:

$236.78 Domestic price for female 4-week

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**Details**

- **Detailed Description**

Mice homozygous for this "mPer2<sup>Luc</sup>" mutation are viable and fertile with no developmental or morphological differences compared to wildtype littermates. Expression of PERIOD2::LUCIFERASE (or mPER2::LUC) fusion protein during peak periods is similar to endogenous pPER2 patterns. Homozygous mice have normal entrainment and circadian behaviors. These mPer2<sup>Luc</sup> knock-in mice may be useful as a real-time reporter of circadian dynamics in different tissues.

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**Development**

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**Expression Data**

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**Control Suggestions**

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**Selected References**

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**Genetics**

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**Per2<sup>tm1Jt</sup>**
Genotyping Protocols
Standard PCR: Per2\textsuperscript{tm1Jt}

Genotyping resources and troubleshooting

Dietary Information
LabDiet\textsuperscript{®} 5K52 formulation (6% fat)

Breeding Considerations
When maintaining a live colony, these mice are bred as homozygotes.

Additional Breeding and Husbandry Support
Mating System
Homozygote x Homozygote

Citation
When using the m\textsuperscript{Per2\textsuperscript{Luc}} mouse strain in a publication, please cite the originating article(s) and include JAX stock #006852 in your Materials and Methods section.

Pricing & Availability
Available
Live mice available in varying quantities. Ask Customer Service for details.

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Related Products and Services

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Email: TechTran@jax.org

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