Overview

R E A D  M O R E  +

Also Known As: TRPV1

These TRPV1 knock-in mice express Cre recombinase from the endogenous Trpv1 locus and may be useful for generating conditional mutations to study heat and capsaicin nociception or fate mapping of TRPV1 expression during development.

Donating Investigator
Allan Basbaum, Univ. California, San Francisco

GENETIC OVERVIEW

Genetic Background
Generation
N10pN3F7
(2020-02-18 00:00:00)

Trpv1<sup>tm1(cre)Bbm</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>Trpv1</td>
<td>transient receptor potential cation channel, subfamily V, member 1</td>
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V I E W  G E N E T I C S

RESEARCH APPLICATIONS

Sensorineural Research
Research Tools
Neurobiology Research

V I E W  A L L  R E S E A R C H  A P P L I C A T I O N
These mice contain a myc tagged, IRES-cre recombinase sequence inserted downstream of the *Trpv1* (transient receptor potential cation channel, subfamily V, member 1) stop codon. The endogenous *Trpv1* coding sequence is not disrupted. The TRVP1 nociceptor is primarily expressed in dorsal root ganglia and peripheral sensory nerve endings, and is also detected in the central nervous system, and non-neuronal thermoregulatory tissues. When crossed with a strain containing *loxP* site-flanked sequence, Cre-mediated recombination results in deletion of the flanked segment. Cre recombinase expression mimics the endogenous *Trpv1* expression pattern. Recombination occurs in primary efferent neurons in the dorsal root ganglion and trigeminal ganglia, in limited areas of the brain and in a subset of arteriolar smooth muscle cells in thermoregulatory tissues (cremaster muscle). Mice that are homozygous for the targeted mutation are viable and fertile.
Genotyping Protocols
Separated PCR: Trpv1 Alternate3
Genotyping resources and troubleshooting
Dietary Information
New Diet as of March 2015: Lab Diet® 5K0Q (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 Homozygote

Citation
When using the TRPV1\textsuperscript{Cre} mouse strain in a publication, please cite the originating article(s) and include JAX stock #017769 in your Materials and Methods section.

Animal Health Reports
Facility Barrier Level Descriptions

- AX10 (Standard)

Pricing & Availability

Available

Live mice available in varying quantities. Ask Customer Service for details.
### RELATED PRODUCTS AND SERVICES

| Frozen Mouse Embryo | B6.129-Trpv1<tm1(cre)Bbm>/J | $2595.00 |

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one breeding pair to avoid delays in their research.

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**TERMS OF USE**

General Terms and Conditions

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ADDITIONAL USE RESTRICTIONS APPLY

Use of MICE by companies or for-profit entities requires a license prior to shipping.

**LICENSING INFORMATION**

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**Related Strains**

- All
- By Allele
- By Gene
- By Collection