Also Known As: Trem2 KO
This CRISPR/Cas9 generated mutant of the Trem2 gene carries a knock out mutation.

Donating Investigator
Mike Sasner, The Jackson Laboratory
GENETIC OVERVIEW

Genetic Background
Generation
??+pN2F5
(2018-04-02 00:00:00)

Trem2<sub>em2Adiu</sub>

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
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</table>
| Endonuclease-mediated
(Null/Knockout)    | Trem2       | triggering receptor expressed on myeloid cells 2 |

RESEARCH APPLICATIONS
Neurobiology Research

BASE PRICE
Starting at:
$255.00 Domestic price for female 4-week

Details

Detailed Description
This is a CRISPR/Cas9 generated knock out mutant of the Trem2, triggering receptor expressed on myeloid cells 2, gene. The allele has a NHEJ-generated 175bp deletion that introduces a stop codon at amino acid 17. The targeted Trem2 gene encodes for a protein that is part of a receptor signaling complex with TYRO protein tyrosine kinase binding protein, and that activates macrophages and dendritic cells immune response. Loss-of-function variants of the TREM2 gene are associated with Alzheimer’s Disease. As the mice are characterized, we will modify the strain description and add phenotype data.

Development

Control Suggestions

Genetics
Genotyping Protocols
Separated PCR: Trem2\textsuperscript{em2(KO)Msasn}
End Point Analysis: Trem2\textsuperscript{em1Adiuj-EP}
Genotyping resources and troubleshooting

Breeding Considerations
Heterozygotes may be bred to C57BL/6J (Stock No. 000664), or wildtype littermates. As the mice are characterized, we will modify the strain description if necessary and add data related to viability and fertility.

Additional Breeding and Husbandry Support
Mating System
Homozygote x Homozygote

Citation
When using the Trem2 KO mouse strain in a publication, please cite the originating article(s) and include JAX stock #027197 in your Materials and Methods section.

Animal Health Reports
Facility Barrier Level Descriptions
  AX18 (Maximum)

Pricing & Availability

Estimated to begin distribution on Feb 3, 2020

Available for Pre-order

Domestic
Pricing effective for USA, Canada and Mexico shipping destinations

Live Mouse
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<th>AGE</th>
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<th>PRICE</th>
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