B6.129S4-Traf1\(^{tmTsi}\)/J

**Overview**

**Also Known As: C57BL/6 TRAF**

These TRAF1 mutant mice may be useful in studying negative regulation of tumor necrosis factor (TNF) signaling, NF-kB and AP-1 signaling, T cell receptor (TCR)-induced proliferation of T cells, Th2 responses, TRAF1/Bim function in CD8 memory T cell survival, allergic airway diseases and Rheumatoid arthritis, as well as the role of TRAF1 activation in the pathogenesis of lymphomas. Of note, TRAF1 mutant mice are available on either a BALB/c congenic (Stock No. 008074) or C57BL/6 congenic (Stock No. 008076) background.
Donating Investigator
Erdyni Tsitsikov, Immune Disease Institute (formerly CBRI)

GENETIC OVERVIEW

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<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
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**Traf1<sup>tm1Tsi</sup>**

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<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
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<tr>
<td>Targeted (Null/Knockout)</td>
<td>Traf1</td>
<td>TNF receptor-associated factor 1</td>
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RESEARCH APPLICATIONS

Research Tools
Immunology, Inflammation and Autoimmunity Research
Internal/Organ Research
Cancer Research
Cell Biology Research
Apoptosis Research

BASE PRICE
Starting at:

$2,595.00 Domestic price Cryo Recovery

Details

Detailed Description

Mice homozygous for the Traf1 mutant allele (Traf1<sup>−/−</sup>) are viable and fertile. No protein expression from the targeted gene is observed in CD40-stimulated splenocytes isolated from homozygous mice. Homozygous mice on a C57BL/6 congenic background (B6-Traf1<sup>−/−</sup>) have abnormal memory T cell survival and impaired influenza virus CD8 T cell responses. Activated B6-Traf1<sup>−/−</sup> T cells accumulate increased levels of proapoptotic BH3-only family member Bim, particularly the most toxic isoform, Bim<sup>el</sup>. The donating investigator reports that B6-Traf1 mutant mice may be difficult to breed and gain more weight than BALB/c-Traf1 mutant mice. Homozygous mice on a BALB/c congenic background (BALB/c-Traf1<sup>−/−</sup>) exhibit acute liver injury and elevated serum liver enzymes.
following intratracheal TNF-alpha treatment. Furthermore, activated TRAF1−/− T cells have significantly increased expression of Th2 cytokines (IL-4, IL-5 and IL-13) that elicit enhanced Th2 responses in vivo. BALB/c-TRAF1−/− T cells exhibit elevated nuclear expression of NFAT-interacting protein (NIP45) and also induce significantly more intense pulmonary inflammation and higher airway hyper-responsiveness in OVA allergic inflammation models. Pulmonary leukocyte recruitment is attenuated following inhalation of lipopolysaccharide in BALB/c-TRAF1−/− mice. TRAF1 strains may be useful in studying negative regulation of tumor necrosis factor (TNF) signaling, NF-kB and AP-1 signaling. T cell receptor (TCR)-induced proliferation of T cells, Th2 responses, TRAF1/Bim function in CD8 memory T cell survival, allergic airway diseases and Rheumatoid arthritis, as well as the role of TRAF1 activation in the pathogenesis of lymphomas.

Of note, TRAF1 mutant mice are available on either a BALB/c (Stock No. 008074) or C57BL/6 (Stock No. 008076) congenic background.

In an attempt to offer alleles on well-characterized or multiple genetic backgrounds, alleles are frequently moved to a genetic background different from that on which an allele was first characterized. It should be noted that the phenotype could vary from that originally described. We will modify the strain description if necessary as published results become available.

Genotyping Protocols
Standard PCR: Traf1\textsuperscript{tm1Ts}\textsubscript{i}
Genotyping resources and troubleshooting

Breeding Considerations
When maintaining a live colony, these mice may be bred as homozygotes.
Additional Breeding and Husbandry Support
Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, G200

Pricing & Availability

Typically mice are recovered in 10-14 weeks. Contact Customer Service to place an order or for more information.

Domestic | International

Pricing effective for USA, Canada and Mexico shipping destinations

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<tr>
<th>Cryorecovery - Domestic Pricing</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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</thead>
<tbody>
<tr>
<td>Cryo Recovery</td>
<td>Heterozygous for Traf1&lt;tm1Tsi&gt;</td>
<td>$2,595.00</td>
</tr>
</tbody>
</table>

We will fulfill your order by providing at least two carriers for each strain ordered. The total number, sex, and genotypes provided will vary, although typically 8 or more animals are provided. Please check genotypes which will be recovered. While the genotypes of all animals produced will be communicated to you prior to scheduling shipment, the genotypes of animals provided may not reflect the mating scheme and genotypes described in the strain description. Animals are typically ready to ship in 11-14 weeks. If a second recovery is required to produce the minimum number of animals, then delivery time would increase to approximately 25 weeks. If we fail to produce animals of the correct genotype, you will not be charged. We cannot guarantee the reproductive success of mice shipped to your facility. If the mice are lost after the first three days (post-arrival) or do not produce progeny at your facility, a new order and fee will be necessary.

Cryorecovery to establish a Dedicated Supply for greater quantities of mice. Mice recovered can be used to establish a dedicated colony to contractually supply you mice according to your requirements. Price by quotation.

Related Products and Services

| Frozen Mouse Embryo | $2,595.00 per straw or vial |

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Terms are granted by individual review and stated on the customer invoice(s) and account statement. These transactions are payable in U.S. currency within the granted terms. Payment for services, products, shipping containers, and shipping costs that are rendered are expected within the payment terms indicated on the invoice or stated by contract. Invoices and account balances in arrears of stated terms may result in The Jackson Laboratory pursuing collection activities including but not limited to outside agencies and court filings.

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Terms Of Use

General Terms and Conditions

Licensing Information
Phone: 207-288-6470
Email: TechTran@jax.org

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Leading the search for TOMORROW’S CURES