B6(Cg)-Sting1tm1.2Camb/J
Stock No: 025805 | MPYS, STING
Congenic, Targeted Mutation
Live mice available in varying quantities. Ask Customer Service for details.

Donating Investigator
John C Cambier, University of Colorado Denver and National Jewish Health

GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
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<tbody>
<tr>
<td>?+pN1F9</td>
<td>(2019-06-12 00:00:00)</td>
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Sting1tm1.2Camb

<table>
<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>Sting1</td>
<td>stimulator of interferon response cGAMP interactor 1</td>
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RESEARCH APPLICATIONS

Immunology, Inflammation and Autoimmunity Research
Cell Biology Research
Research Tools
Details

Detailed Description

MPYS<sup>−/−</sup> (STING KO) mice lack exons 3-5 of the transmembrane protein 173 (Tmem173) gene. MYPS acts as a facilitator of innate immune signaling and interferon beta (IFNβ) production through the detection of cytosolic bacterial pathogens and their cyclic dinucleotide metabolites. Mice that are homozygous for this allele are viable and fertile. MPYS<sup>−/−</sup> mice produce less IFNβ and interleukin-6 (IL6) after 8 hours of infection with Listeria monocytogenes or Francisella tularensis than controls, with normal production seen by 24 hours. MPYS<sup>−/−</sup> mice produce more IFNβ than the Tmem173<sup>−/−</sup> mice (Stock No. 017537) which do not produce IFNβ after Listeria monocytogenes infection.

Development

Control Suggestions

Selected References

Genetics

Sting<sup>1tm1.2Camb</sup>

Disease/Phenotype

Disease Terms

Research Areas By Phenotype

Mammalian Phenotype Terms by Genotype

References
Genotyping Protocols
Standard PCR: Tmem173-Alternate 2
Genotyping resources and troubleshooting

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

Breeding Considerations
When maintaining a live colony, homozygous mice may be bred together.

Additional Breeding and Husbandry Support
Mating System
Homozygote x Homozygote

Citation
When using the MPYS™, STING- mouse strain in a publication, please cite the originating article(s) and include JAX stock #025805 in your Materials and Methods section.

Animal Health Reports
Facility Barrier Level Descriptions

* AX12 (Maximum)

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### Pricing & Availability

Live mice available in varying quantities. Ask Customer Service for details.

#### Domestic

Pricing effective for USA, Canada and Mexico shipping destinations

<table>
<thead>
<tr>
<th>AGE</th>
<th>SEX</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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<tr>
<td>4 weeks</td>
<td>Female</td>
<td>Homozygous for Tmem173</td>
<td>$255.00</td>
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<tr>
<td>4 weeks</td>
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<tr>
<td>6 weeks</td>
<td>Male</td>
<td>Homozygous for Tmem173</td>
<td>$255.00</td>
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</table>
### Related Products and Services

| Related Products and Services | B6(Cg)-Tmem173<tm1.2Camb>/J Frozen Embryo | $2595.00 |

### Payment Terms and Conditions

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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Licensing Information

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

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## Related Strains

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<td>By Gene</td>
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<tr>
<td>By Collection</td>
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_all related strains_