**B6;129S-Sox2<sup>tm2Hoch</sup>/J**

Stock No: 017592 | Sox2-GFP

- **Targeted Mutation**

**PLACE ORDER**

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

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**Overview**

**Also Known As: Sox2-GFP**

These Sox2<sup>GFP</sup> knockin/knockout mice have the Sox2 open reading frame replaced by EGFP. Strong EGFP expression is detected in blastocysts, neural progenitor cells and in many adult epithelial tissues.

**Donating Investigator**

Konrad Hchedlinger, Massachusetts General Hospital / Harvard

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**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
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RESEARCH APPLICATIONS
Cancer Research
Cell Biology Research
Research Tools
Developmental Biology Research
Hematological Research
Immunology, Inflammation and Autoimmunity Research

BASE PRICE
Starting at:
$255.00 Domestic price for female
333.51 Domestic price for breeder pair

Details

Detailed Description
An enhanced green fluorescent protein (EGFP) gene replaces the SRY-box containing gene 2 (Sox2) open reading frame in these Sox2<sup> GFP</sup> knockin/knockout mice. SOX2 is a widespread marker of pluripotent and many adult stem/progenitor cell types. In these mice, strong EGFP expression is detected in blastocysts, neural progenitor cells, and embryonic stem cell cultures. In addition, EGFP expression is observed in adult epithelial tissues including testes, forestomach, glandular stomach, anus, cervix, esophagus, lungs, tongue, and lens, as well as glands associated with oral cavity, trachea, and cervix. Heterozygous mice are viable and fertile, while homozygous mice exhibit embryonic lethality. These fluorescent reporter mice may be useful for studying common target genes and pathways in maintaining the self-renewal and differentiation potential of these cells.

Development

Expression Data

Control Suggestions
Genotyping Protocols
Standard PCR: Fluorescent Proteins (Generic GFP)
High Resolution Melting: Sox2<sup>im2Hch</sup> Alternate5
Genotyping resources and troubleshooting

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

Breeding Considerations
When maintaining a live colony, heterozygous mice may be bred with wildtype mice from the colony. The donating investigator reports that homozygous mice are embryonic lethal.

Additional Breeding and Husbandry Support

Mating System
Wild-type x Heterozygote
Heterozygote x Wild-type

Citation
When using the Sox2<sup>im2Hch</sup> mouse strain in a publication, please cite the originating article(s) and include JAX stock #017592 in your Materials and Methods section.

Facility Barrier Level Descriptions
- AX12 (Maximum)
Live mice available in varying quantities. Ask Customer Service for details.

<table>
<thead>
<tr>
<th>Domestic</th>
<th>International</th>
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<tbody>
<tr>
<td>Pricing effective for USA, Canada and Mexico shipping destinations</td>
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</table>

### Live Mouse

<table>
<thead>
<tr>
<th>AGE</th>
<th>SEX</th>
<th>GENOTYPE</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approx 4-8 weeks</td>
<td>Female</td>
<td>Heterozygous for Sox2&lt;sup&gt;2m2Hoch&lt;/sup&gt;</td>
<td>$255.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Heterozygous for Sox2&lt;sup&gt;2m2Hoch&lt;/sup&gt;</td>
<td>$255.00</td>
</tr>
<tr>
<td>Approx 4-8 weeks</td>
<td>Female</td>
<td>Wild-type for Sox2&lt;sup&gt;2m2Hoch&lt;/sup&gt;</td>
<td>$78.51</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Wild-type for Sox2&lt;sup&gt;2m2Hoch&lt;/sup&gt;</td>
<td>$78.51</td>
</tr>
</tbody>
</table>

### Breeder Pair

<table>
<thead>
<tr>
<th>SEX</th>
<th>GENOTYPE</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Heterozygous for Sox2&lt;sup&gt;2m2Hoch&lt;/sup&gt;</td>
<td>$333.51</td>
</tr>
<tr>
<td>Male</td>
<td>Wild-type for Sox2&lt;sup&gt;2m2Hoch&lt;/sup&gt;</td>
<td></td>
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### Related Products and Services

<table>
<thead>
<tr>
<th>Product</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frozen Mouse Embryo</td>
<td>$2,595.00 per straw or vial</td>
</tr>
</tbody>
</table>

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