Overview

Also Known As: hypophosphatemia 2 Jackson
This model of X-linked dominant hypophosphatemic rickets does not display degeneration of the organ of Corti or hearing loss.

READ MORE +

GENETIC OVERVIEW

| Genetic Background | Generation |
**Phex**

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
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<tr>
<td>Spontaneous</td>
<td>Phex</td>
<td>phosphate regulating endopeptidase homolog, X-linked</td>
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**RESEARCH APPLICATIONS**

- Internal/Organ Research
- Metabolism Research
- Developmental Biology Research

**BASE PRICE**

Starting at:

$2,854.50 Domestic price Cryo Recovery

**Details**

**Detailed Description**

Heterozygous females and hemizygous males have a square shaped trunk, shortened tail, and shortened hind limbs. Hemizygous males weigh approximately 25% less than wildtype male controls and the skull has a smaller length and width than normal with a lower areal bone mineral density and larger inner canthal distance. Hemizygous males have hypocalcemia, decreased serum PO$_4^{2-}$ and Ca$^{2+}$, undermineralized bone, thickened and irregular growth plates of the knees, and higher lean body mass. Unlike Phex hemizygotes, Phex hemizygous males have normal hearing by ABR threshold analysis and, although cross sections of the cochlea show thickening of the temporal bone and a precipitate in the scala tympani, no degeneration of the organ of Corti or spiral ganglion is found. This mutant strain provides a model of X-linked dominant hypophosphatemic rickets.

**Control Suggestions**

**Selected References**

**Genetics**

**Phex$^{Hyp-2J}$**

**Disease/Phenotype**
Genotyping Protocols

Genotyping resources and troubleshooting

Appearance
black, small size, square trunk, shortened hindlimbs and tail
Related Genotype: a/a Phex<sup>Hyp-2J</sup>/Y male

black, squared trunk, shortened hindlimbs and tail
Related Genotype: a/a Phex<sup>Hyp-2J</sup>/+ female

Citation
When using the hypophosphatemia 2 Jackson mouse strain in a publication, please cite the originating article(s) and include JAX stock #003950 in your Materials and Methods section.

Animal Health Reports
Facility Barrier Level Descriptions
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.

Cryo Recovery - Domestic Pricing

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<tr>
<th>SERVICE/PRODUCT</th>
<th>DESCRIPTION</th>
<th>PRICE</th>
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<tbody>
<tr>
<td>Cryo Recovery</td>
<td>X linked - Heterozygous Females and Wild-type males for Phex&lt;sup&gt;Hyp-2J&lt;/sup&gt;</td>
<td>$2,854.50</td>
</tr>
</tbody>
</table>

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Related Strains

- All
- By Allele
- By Gene
- By Collection

All Related Strains

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