Overview

Also Known As: B6 Pah<sup>enu2</sup>

Pah<sup>enu2</sup> mice on a C57BL/6J congenic background may be useful when studying phenylketonuria (PKU).

Donating Investigator

Michael Allen, University of North Texas Health Science Center
**Pah<sup>enu2</sup>**

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
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<tbody>
<tr>
<td>Chemically induced (ENU)</td>
<td>Pah</td>
<td>phenylalanine hydroxylase</td>
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</table>

**RESEARCH APPLICATIONS**

Metabolism Research  
Neurobiology Research  
Mouse/Human Gene Homologs

**BASE PRICE**

Starting at:

- $255.00 Domestic price for female 4-week
- $510.00 Domestic price for breeder pair

**Details**

**Detailed Description**

Homozygous mutant mice display severe hyperphenylalaninemia and other hallmarks of phenylketonuria (PKU) when not maintained on a phenylalanine-free diet. Hyperphenylalaninemia leads to progressive neurological symptoms and seizures. Mice are hypopigmented on a standard diet. Homozygous females and males are viable, however homozygous females with PKU will not rear their young when maintained on a standard mouse diet.

*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 of these C57BL/6J-congenic mice could vary from that originally described on a BTBR genetic background. We may modify the strain description if necessary as published results become available.*

**Development**

**Control Suggestions**

**Selected References**
Genotyping Protocols
End Point Analysis: \textit{Pah}^\textit{enu2} EP
Genotyping resources and troubleshooting

Breeding Considerations
When maintaining a live colony, heterozygous mice may be bred to wildtype mice from the colony or C57BL/6J inbred mice (Stock No. 000664) if not maintained on a phenylalanine-free diet. If using a phenylalanine-free diet, homozygous males and females are viable and fertile and may be bred together.

\textbf{Additional Breeding and Husbandry Support}

\textbf{Mating System}
Wild-type x Heterozygote
Heterozygote x Wild-type

\textbf{Citation}
When using the B6 Pah\textit{enu2} mouse strain in a publication, please cite the originating article(s) and include JAX stock #029218 in your Materials and Methods section.

\textbf{Animal Health Reports}
Facility Barrier Level Descriptions
\textit{AX12} (Maximum)

\section*{Pricing & Availability}
Live mice available in varying quantities. Ask Customer Service for details.
<table>
<thead>
<tr>
<th>AGE</th>
<th>SEX</th>
<th>GENOTYPE</th>
<th>PRICE</th>
</tr>
</thead>
</table>
| 4 weeks | Female | Heterozygous for Pah

$enu2$ | $255.00 |
|       | Male   | Heterozygous for Pah

$enu2$ | $255.00 |
| 4 weeks | Female | Wild-type for Pah

$enu2$ | $78.51 |
|       | Male   | Wild-type for Pah

$enu2$ | $78.51 |
| 5 weeks | Female | Heterozygous for Pah

$enu2$ | $255.00 |
|       | Male   | Heterozygous for Pah

$enu2$ | $255.00 |
| 5 weeks | Female | Wild-type for Pah

$enu2$ | $78.51 |
|       | Male   | Wild-type for Pah

$enu2$ | $78.51 |
| 6 weeks | Female | Heterozygous for Pah

$enu2$ | $255.00 |
|       | Male   | Heterozygous for Pah

$enu2$ | $255.00 |
| 6 weeks | Female | Wild-type for Pah

$enu2$ | $78.51 |
|       | Male   | Wild-type for Pah

$enu2$ | $78.51 |
| 7 weeks | Female | Heterozygous for Pah

$enu2$ | $255.00 |
|       | Male   | Heterozygous for Pah

$enu2$ | $255.00 |
| 7 weeks | Female | Wild-type for Pah

$enu2$ | $78.51 |
|       | Male   | Wild-type for Pah

$enu2$ | $78.51 |
| 8 weeks | Female | Heterozygous for Pah

$enu2$ | $255.00 |
|       | Male   | Heterozygous for Pah

$enu2$ | $255.00 |
| 8 weeks | Female | Wild-type for Pah

$enu2$ | $78.51 |
|       | Male   | Wild-type for Pah

$enu2$ | $78.51 |
| 9 weeks | Female | Heterozygous for Pah

$enu2$ | $255.00 |
|       | Male   | Heterozygous for Pah

$enu2$ | $255.00 |
| 9 weeks | Female | Wild-type for Pah

$enu2$ | $78.51 |
|       | Male   | Wild-type for Pah

$enu2$ | $78.51 |
| 10 weeks | Female | Heterozygous for Pah

$enu2$ | $255.00 |
|       | Male   | Heterozygous for Pah

$enu2$ | $255.00 |
| 10 weeks | Female | Wild-type for Pah

$enu2$ | $78.51 |
|       | Male   | Wild-type for Pah

$enu2$ | $78.51 |
| 11 weeks | Female | Heterozygous for Pah

$enu2$ | $255.00 |
|       | Male   | Heterozygous for Pah

$enu2$ | $255.00 |
| 11 weeks | Female | Wild-type for Pah

$enu2$ | $78.51 |
|       | Male   | Wild-type for Pah

$enu2$ | $78.51 |
| 12 weeks | Female | Heterozygous for Pah

$enu2$ | $255.00 |
|       | Male   | Heterozygous for Pah

$enu2$ | $255.00 |
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All

By Allele

By Gene

By Collection

All Related Strains