B6.129P2-Nos3 tm1Unc/J

Stock No: 002684 | eNos KO

Congenic Targeted Mutation

AVAILABLE NOW

PLACE ORDER

Sized to accommodate orders of up to 10 or more with age range. Ask Customer Service for details.
Also Known As: eNos KO
Mice homozygous for the nitric oxide synthase 3 endothelial cell knockout allele (Nos3<sup>−/−</sup> or eNOS<sup>−/−</sup>) may be useful for studying wound healing, hypertension and other cardiovascular defects, insulin resistance, hyperlipidemia and lung development.

Donating Investigator
Dr. Oliver Smithies, University of North Carolina at Chapel Hill

<table>
<thead>
<tr>
<th>GENETIC OVERVIEW</th>
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<tbody>
<tr>
<td>Genetic Background</td>
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<td>Generation</td>
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<thead>
<tr>
<th>Nos3&lt;sup&gt;tm1Unc&lt;/sup&gt;</th>
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<tr>
<td>Allele Type</td>
</tr>
<tr>
<td>Gene Symbol</td>
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<td>Gene Name</td>
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RESEARCH APPLICATIONS
Internal/Organ Research
Cardiovascular Research
Diabetes and Obesity Research
Details

Detailed Description
Mice homozygous for the Nos3<sup>tm1jinc</sup> targeted mutation are viable and fertile. They have elevated blood pressure that is about 20 mmHg higher than that seen in normal wildtype siblings. They also show a decreased heart rate. Female homozygotes are smaller in body weight than normal wildtype siblings. Hyperglycemic-euglycemic clamp studies demonstrate that homozygotes exhibit insulin resistance at the level of the liver and peripheral tissues.

Development

Control Suggestions

Genetics

Nos3<sup>tm1jinc</sup>

Disease/Phenotype

Disease Terms

Research Areas By Genotype

Mammalian Phenotype Terms by Genotype

References

Technical Support

Chat Offline
### Genotyping Protocols
- Standard PCR: **Nos3<sup>tm1Unc</sup>
- Separated MCA: **Nnt<sup>tm1Unc</sup>
- Standard PCR: **Nos3<sup>tm1Unc</sup>

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

### Breeding Considerations

**This strain is a good breeder.**

When maintaining a live colony, these mice are bred as homozygotes (by homozygous sibling matings).

### Additional Breeding and Husbandry Support

#### Mating System
Homozygote x Homozygote

#### Appearance
- Related Genotype: a/a

#### Citation
When using the inbred BXD mouse strain in a publication, please cite the originating articles and include JAX stock #002684 in your Materials and Methods section.

### Pricing & Availability
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#### Domestic
Pricing effective for USA, Canada and Mexico shipping destinations

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<th>AGE</th>
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### Related Strains

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All Related Strains