The spontaneous mutation, \( \text{Cep290}^{rd16} \) (originally \( \text{rd16} \)), was discovered in the BXD24 recombinant inbred strain. Mice exhibit complete degeneration of retinal photoreceptors resulting in blindness.
**Detailed Description**

The BXD RI strains are used to study the genetics of behavioral phenotypes including alcohol and drug addiction, stress, and locomotor activity. The BXD set of RI strains also is used in the genetic analysis of numerous complex or potentially complex physiologic phenotypes including differences in organ weight and bone mineral density. The strain distribution pattern (SDP) for BXD RI strains is available through the [Mouse Genome Informatics Recombinant Inbred Strain Distribution Patterns](https://www.informatics.jax.org/distribution_patterns).

In 2004, a spontaneous mutation, *rd16*, was discovered in the BXD24/TyJ recombinant inbred line. Mice exhibit complete degeneration of retinal photoreceptors (Seecharan et al. 2003) resulting in blindness.
Genotyping Protocols
Genotyping resources and troubleshooting
Dietary Information
LabDiet® 5K52 formulation (6% fat)

Mating System
Sibling x Sibling

Appearance
chocolate brown

Related Genotype: \( a/a \) Tyrp1\(^{b} \) /Tyrp1\(^{b} \) Myo5a\(^+ \) /Myo5a\(^+ \)

Citation
When using the rd16 mouse strain in a publication, please cite the originating article(s) and include JAX stock #000031 in your Materials and Methods section.

Animal Health Reports
Facility Barrier Level Descriptions

- FGB29 (Standard)

Pricing & Availability

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

Available

<table>
<thead>
<tr>
<th>Live Mouse</th>
<th>AGE</th>
<th>SEX</th>
<th>PRICE</th>
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<tbody>
<tr>
<td></td>
<td>Approx 4-8 weeks</td>
<td>Female</td>
<td>$139.90</td>
</tr>
<tr>
<td></td>
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<td>Male</td>
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