

A neo/ura3 fragment flanked by LoxP sites was used to replace the first three Myo1a exons via yeast-mediated homologous recombination. Absence of protein in mutants was confirmed by immunoblot of small intestines. Immunostaining of mutant duodenal sections with an antibody directed against the TH1 domain showed the expected lack of signal in mutants.

Keywords: [Myosin 1A](#) [Mtys](#) [knockout](#)

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## Mouse Information

Common Name	Myosin1A KO
VCMR ID	OU
Date Cryopreserved	2013-01-11
Method of Cryopreservation	Sperm
Trial IVF % Fertilization	86.00%

## Genetic Alteration

### Mutation #1: Targeted Mutagenesis

Allele	Name: myosin IA; targeted mutation 1, Matthew J Tyska Symbol: Myo1a <sup>tm1Mtys</sup> MGI: <a href="#">3587749</a>
Zygoty at cryopreservation	Homozygous
PCR Genotyping Protocol	<a href="#">Myo1A_Genotyping.docx</a>
Citations	<p><b>Publication</b></p> <p><a href="#">Myosin-1a is critical for normal brush border structure and composition.</a> (2005) <i>Mol Biol Cell</i> <b>16</b>: 2443-57 (Added 5/19/2014) PMID: <a href="#">15758024</a></p>

## Background Strain Information

Strain Type	Mixed
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<b>Chimera/Founder Genetic Background</b>	129S1/SvImJ
<b>Cryopreservation Strain Background (VCMR)</b>	129S1/SvImJ
<b>Viability and Fertility Data</b>	<i>Not provided</i>

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