

Prostaglandin E receptor 2 (subtype EP2) targeted null/knockout on C57Bl/6 background.

Mice that are homozygous for the targeted mutation are viable, normal in size and do not display any gross physical or behavioral abnormalities. Reduced fertility in homozygous females is due to a pre-implantation defect. Fewer eggs are released during ovulation, of which fewer are fertilized and implanted when compared to wildtype controls, resulting in smaller litters (3 pups/litter). Mutant mice display slightly elevated baseline systolic blood pressure. Prostaglandin 2 infusion or high salt diet causes systolic hypertension in homozygous mice. This mutant mouse strain represents a model that may be useful in studies of salt sensitive hypertension and infertility. Strain of origin is 129S6/SvEvTac backcrossed onto C57Bl/6 more than 10 times.

Keywords: [Brey](#) [EP2 null](#) [Ptger2](#) [Prostaglandins E](#)

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## Mouse Information

Common Name	EP2nullB6
VCMR ID	ER
Date Cryopreserved	2005-05-23
Method of Cryopreservation	Embryo

## Genetic Alteration

Mutation #1: Targeted Mutagenesis	
Allele	Name: targeted mutation 1 Symbol: Ptger2 <sup>tm1Brey</sup> MGI: <a href="#">3179967</a>
Zygoty at cryopreservation	Homozygous
PCR Genotyping Protocol	<a href="#">EP2null_PCR_protocol.pdf</a>
Citations	<p><b>Publication</b></p> <p><a href="#">Salt-sensitive hypertension and reduced fertility in mice lacking the prostaglandin EP2 receptor.</a> (1999) <i>Nat Med</i> 5: 217-20 (Added 12/21/2013) PMID: <a href="#">9930871</a></p>


## Background Strain Information

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<b>Strain Type</b>	Congenetic Strain
<b>Chimera/Founder Genetic Background</b>	129S6/SvEvTac
<b>Cryopreservation Strain Background (VCMR)</b>	C57BL/6J
<b>Viability and Fertility Data</b>	Infertility in homozygous null females, use heterozygous females for breeding. Strain background: Backcrossed >10 generations onto C57Bl6/J.

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## Attachments

 [EP2nullB6\\_supporting\\_info.docx](#) - Added on June 18, 2019 at 2:03 PM by [Jennifer Skelton](#)

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 [EP2null\\_PCR\\_protocol.pdf](#) - Added on June 18, 2019 at 2:03 PM by [Jennifer Skelton](#)

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