

Prostaglandin E receptor 2 (subtype EP2) targeted null/knockout on 129S6 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.

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

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## Mouse Information

Common Name	EP2null129
VCMR ID	KJ
Date Cryopreserved	2009-09-09
Method of Cryopreservation	Sperm
Trial IVF % Fertilization	88.00%

## Genetic Alteration

Mutation #1: Targeted Mutagenesis	
Allele	Name: prostaglandin E receptor 2 (subtype EP2); targeted mutation 1, Richard M Breyer Symbol: Ptger2 <sup>tm1</sup> Brey MGI: <a href="#">2179967</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>	129S6/SvEvTac
<b>Viability and Fertility Data</b>	No known viability or fertility abnormalities. Strain Background: Backcrossed >10 generations onto 129S6 at cryopreservation.

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## Attachment

 [EP2null\\_PCR\\_protocol.pdf](#) - Added on June 18, 2019 at 2:21 PM by Jennifer Skelton

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