Overview

A lacZ-neo cassette replaces exon 1 of the secreted frizzled-related protein 1 (Sfrp1) gene. These mice may be useful for studying developing prostate.
In this strain, a lacZ-neo cassette replaces exon 1 of the secreted frizzled-related protein 1 (Sfrp1) gene, abolishing gene function. SFRP1 is a stromal-to-epithelial paracrine signaling molecule expressed in the developing mesenchyme/stroma of the prostate from p1 to p21. It is also a modulator of Wnt signaling, disruption of which has been associated with cancer progression. Homozygotes are viable and fertile. Sfrp1lacZ mice exhibit multiple prostatic developmental defects including reduced branching morphogenesis, and delayed proliferation. Increased expression of genes encoding prostate-specific secretory proteins such as beta-microseminoprotein (Msmb), spermine binding protein (Sbp), and transglutaminase 4 (Tgm4) is also seen in these mice. β-gal activity is evident in the developing mesenchyme/stroma of the prostate gland from p1 to p21. β-gal activity also was seen in various locations during embryonic development, with low levels detected as early as the 3-somite stage in the extra-embryonic yolk sac and
Genotyping Protocols

Standard PCR: Sfrp1^{tm1Jrbn}
Standard PCR: Generic Neo
Standard PCR: Generic LacZ
Probe: Generic Neo
Probe: Generic LacZ

Genotyping resources and troubleshooting

Breeding Considerations
When maintaining a live colony, homozygous mice may be bred together.

Additional Breeding and Husbandry Support

Citation
When using the B6.129S-Sfrp1^{tm1Jrbn}/PcmaJ mouse strain in a publication, please cite the originating article(s) and include JAX stock #023209 in your Materials and Methods section.

Animal Health Reports

Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, G200
Pricing & Availability

Cryo Recovery

Typically mice are recovered in 10-14 weeks. Contact Customer Service to place an order or for more information.

Frozen Mouse Embryo

B6.129S-Sfrp1<tm1Jrbn>/PcmaJ Frozen Embryo

$2,854.50

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Terms of Use

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