

This mouse line was generated using both gene targeting and RMCE. The resulting allele expresses an H2B-Apple fusion protein from the endogenous Ins2 promoter, thereby marking pancreatic beta cells with nuclear-localized red fluorescence.

Keywords: [Insulin 2](#) [Mgn](#) [Apple](#) [Ins2](#) [hGH](#) [Targeted Mutation](#)

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Mouse Information

Common Name	Ins2.Apple
VCMR ID	ZI
Date Cryopreserved	2018-12-18
Method of Cryopreservation	Sperm
Trial IVF % Fertilization	68.00%

Genetic Alteration

Mutation #1: Targeted Mutagenesis	
Allele	Name: insulin II; targeted mutation 1.1, Mark A Magnuson Symbol: Ins2 ^{tm1.1Mgn}
Zygosity at cryopreservation	Heterozygous
PCR Genotyping Protocol	Ins2.Apple.hGH_PCR_Protocol.doc
Citations	<p>Publication</p> <p>Transgene-associated human growth hormone expression in pancreatic β-cells impairs identification of sex-based gene expression differences. (2019) <i>Am J Physiol Endocrinol Metab</i> 316: E196-E209 (Added 12/14/2018) PMID: 30532991</p>

Background Strain Information

Strain Type	Congenic Strain
Chimera/Founder Genetic Background	129S6/SvEvTac

Cryopreservation Strain Background (VCMR)	C57BL/6J
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Viability and Fertility Data	Homozygous litters are viable and fertile. Backcrossed 9 generations onto C57Bl6/J.
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Attachments



[Genetic_Validation_20190219_Summary_Report.pdf](#) - Added on March 29, 2019 at 11:31 AM by Jennifer Skelton



[Genetic_Validation_Full_Report.pdf](#) - Added on March 29, 2019 at 11:31 AM by Jennifer Skelton
