

TRM: Islet-mER-Cre-mER Mice

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BACKGROUND

Insulin gene enhancer protein ISL-1 or ISL1 transcription factor, LIM/homeodomain is a highly conserved gene (UniProtKB-P61371). It binds to insulin gene enhancer sequences and is necessary for heart development. In addition, it plays an essential role in the gene regulatory network crucial for retinal ganglion cell (RGC) differentiation.

TECHNOLOGY DESCRIPTION

These targeted mutation knock-in mice have a tamoxifen inducible Cre-mediated recombination system ("MerCreMer") driven by the endogenous Isl1 (ISL1 transcription factor, LIM/homeodomain) promoter.

APPLICATIONS

These mice may be useful for generating conditional mutations for studying cell lineages during development of the nervous system, heart, pituitary gland, pancreas and stomach.

STATE OF DEVELOPMENT

The mice are designated Tangible Research Material (TRM). A complete description, including genotyping, phenotyping, etc is found at The Jackson Lab cat. No. 029566; <https://www.jax.org/strain/029566>

INTELLECTUAL PROPERTY INFO

Academic and non-profit institutions please order directly from The Jackson Laboratory. Commercial entities require a license from UC San Diego contact (<https://innovation.ucsd.edu/contact/>).

CONTACT

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OTHER INFORMATION

KEYWORDS

DNA-binding, Activator,
Developmental protein, transcription
regulation

CATEGORIZED AS

- ▶ **Medical**
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- ▶ **Research Tools**
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