

STOCK *Mirc28^{tm1Mtm}* /Mmjax

MMRRC Stock No: 34660-JAX

 Targeted Mutation

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tagged null allele when combined with Flp or Cre recombinase expressing strains. This mutant mouse strain may be useful in studies of microRNA biology.

Donating Investigator

Michael T McManus, University of California, San Francisco

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GENETIC OVERVIEW

Genetic Background

Generation

Mirc28^{tm1Mtm}

Alele Type

Targeted (Conditional ready (e.g. floxed), Reporter, Null/Knockout)

Gene Symbol

Mirc28

Gene Name

microRNA cluster 28, including Mir296 through Mir298

Marker(s)

Marker Symbol

Mir296

Mir298

Marker Name

microRNA 296

microRNA 298

VIEW GENETICS

RESEARCH APPLICATIONS

Details

Detailed Description

Mice that are heterozygous for the targeted mutation are viable, fertile, normal in size and do not display any gross physical or behavioral abnormalities. When combined with a Flp recombinase-expressing strain, the *lacZ* and neomycin genes are removed leaving an *FRT* site and the *loxP*-flanked miR-296/miR-298 (Mirc28) stem loop. A further cross to a Cre-recombinase-expressing strain generates the null allele.

When combined with a Cre-recombinase-expressing strain, the neomycin cassette and miR-296/miR-298 stem loop are removed leaving a *lacZ* tagged null allele (FRT-*lacZ*-*loxP*). Homozygous mice are viable, but have not been characterized. This mutant mouse strain may be useful in studies of microRNA biology.

Development

Expression Data

Control Suggestions

Genetics

Mirc28^{tm1Mtm}

Mir296

Mir298

Disease/Phenotype

Disease Terms

[+ Research Areas By Phenotype](#)

[+ Mammalian Phenotype Terms by Genotype](#)

[+ References](#)

[- Technical Support](#)

C O N T A C T T E C H N I C A L S U P P O R T

Genotyping Protocols

Standard PCR:[Mir296/298](#)

[Genotyping resources and troubleshooting](#)

Breeding Considerations

While maintaining a live colony, the donating investigator crossed heterozygote to wild-type. Homozygotes are viable, but fertility has not been assessed.

[Additional Breeding and Husbandry Support](#)

Citation

When using the STOCK *Mirc28*^{tm1Mtm}/Mmjax mouse strain in a publication, please [cite the originating article\(s\)](#) and include MMRRC stock #34660 in your Materials and Methods section.

Animal Health Reports

[Facility Barrier Level Descriptions](#)

Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, [G200](#)

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Q U E S T I O N S A B O U T T E R M S O F U S E

LICENSING INFORMATION

Phone: 207-288-6470

Email: TechTran@jax.org

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All

By Allele

By Gene

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