

Docket #: S15-097

Tg.Agrp-Cre transgenic mice

Dr. Greg Barsh and Dr. Allison Xu have generated transgenic mice that express Cre recombinase under control of regulatory elements from agouti-related protein (Agrp). The Agrp neurons are critical for regulation of a wide variety of metabolic functions. The Tg.Agrp-Cre mice allow targeted expression of genes in Agrp neurons and thus are useful in the development of therapeutic interventions for metabolic diseases.

Stage of research

The mice have been used in metabolic studies.

Special handling instructions

Some of these mice may exhibit early (and unwanted) transgene activity and thus the mice should be maintained with a reporter gene that allows detection of this early transgene activity. The animals should be screened by ear or tail biopsy to avoid using the unwanted animals. Mice with early transgene activity should not be used for breeding.

Applications

- Therapeutic development
- Research

Advantages

- Allow cell type specific expression of genes in Agrp neurons

Publications

- Xu AW, Kaelin CB, Takeda K, Akira S, Schwartz MW, Barsh GS. [PI3K integrates the action of insulin and leptin on hypothalamic neurons.](#) J Clin Invest. 2005 Apr;115(4):951-8. Epub 2005 Mar 10.

Innovators

- Greg Barsh
- Allison (Wanting) Xu

Licensing Contact

Brenda Martino

Biological Materials Specialist

[Email](#)