TACONIC

TACONIC BIOSCIENCES HAS THE EXPERIENCE...

2000+ custom mouse models generated

2600+ pronuclear injections conducted

99+% of projects successfully delivered

95% customer satisfaction rate

20+ years experience generating custom mouse models

60+ years of breeding experience

Creating custom rodent models can be technically challenging, time-consuming, and expensive. When you need a custom model to take your research to the next level, Taconic has the experience and expertise to make sure it is done right, while saving you valuable time and resources.

Founded by a group of notable scientists - including a Nobel Prize winner - and staffed by the industry's leading scientists in mouse genetics, Taconic has been the global leader in custom model generation for over fifteen years. Taconic is also proud to have pioneered a variety of new technologies in the field, including *in vivo* gene knock down, and we feature the broadest portfolio of technologies when it comes to custom model generation. Literally, thousands of projects have leveraged Taconic's innovative technologies, enabling significant advances in the scientific community's knowledge of gene function and human disease.

Join the hundreds of companies and institutions that have turned to Taconic for knowledge and expertise, best-in-class cloning, commitment to quality, excellent project management, and integrated GEMs Design and GEMs Management capabilities. The model that Taconic generates for you belongs to you. Taconic is covered by multiple technology licenses and employs its own proprietary technology so that you may use and freely publish the results obtained with your custom model.

CUSTOM MICE... FITTING YOUR NEEDS

GENE INACTIVATION: Identify the role of specific genes, gain important insights into mechanisms of human disease, and speed drug discovery with exclusive commercial rights to the tamoxifen-inducible CreER gene switch

- Constitutive KO
- Conditional KO
- Conditional KO with CreER gene switch

GENE MUTATION/REPLACEMENT: Model human disease, follow gene expression, identify gene transcriptional regulatory elements, generate custom Cre lines, and more...

- Constitutive KI
- Constitutive KI
- Conditional KI
- Constitutive KI with optional Conditional KO

GENETIC HUMANIZATION: Replace drug targets with their human orthologs for compound testing, or model physiological processes in a more human-like fashion by replacing key mouse genes. Capitalize on Taconic's large single-step genomic replacement capabilities (gene replacements of up to 120kb).

- Humanization
- Humanized KI with optional Conditional KO

GENE EDITING: Cost-effectively reduce timelines for point mutations, knockout, and small genetic modifications with Taconic's most advanced CRISPR/Cas technology, licensed through patent holder the Broad Institute

- CRISPR/Cas9

TRANSGENE EXPRESSION: Evaluate the functional role of genes in specific disease processes through overexpression of genes in transgenic models

- Targeted Transgenesis
- Conditional Targeted Transgenesis
- Random Transgenesis - Pronuclear Injection

INDUCIBLE/REVERSIBLE CONTROL OF GENE FUNCTION: Leverage RNAi gene knockdown for studies which require transient down-regulation of genes. Apply inducible miRNA overexpression to learn about functional roles of microRNAs in an *in vivo* setting

- Inducible *in vivo* RNAi gene knockdown
- Inducible miRNA overexpression

Discover how Taconic's GEMs Design capabilities can enhance your research today.

GEMs Design

GENETICALLY ENGINEERING THE RIGHT MODEL TO TAKE YOUR RESEARCH FURTHER.

Take Your Research Further

GEMS DESIGN

Taconic Biosciences GEMs Design empowers our clients to develop research models specifically suited to the unique needs of their discovery and development studies or therapeutic programs.

- Gene Inactivation
- Gene Mutation or Replacement
- CRISPR Gene Editing
- Transgene Expression
- miRNAExpression
- Cohort Production Packages

PRECISION RESEARCH MODELS

Research organizations demand precision tools that better reflect human physiology. Taconic Biosciences leads the field delivering innovative solutions to meet these continually evolving needs. Our core competencies include the delivery of complex strategies that both integrate human genetic sequences and engraft human cells and tissues into custom mouse and rat models.

- Human Gene Replacement
- Human Cell and Tissue Engraftment

GEMS MANAGEMENT

Taconic's fully integrated GEMs Management brings innovative models from design to study-ready cohorts with unprecedented speed and transparency.

- Embryology
- Rapid Colony Expansion
- Contract Breeding
- Surgical Services
- Tissue Collection
- Genotyping and Molecular Analysis
- Microbiome and Germ-Free Research Models and Services

CHOOSE TACONIC

For more than 60 years, Taconic has anticipated the needs of the scientific community to deliver models and services that meet the diverse needs of biomedical and biopharmaceutical researchers.

Today that forward thinking and commitment to working collaboratively has resulted in a client-centric environment infused with a knowledge bank that allows you to select the optimum model for your study based on informed insight into the generation of genetically engineered mouse and rat models.

YOUR COLLABORATIVE PARTNER

As a full-service biosciences company, Taconic can help you acquire, test, develop, breed, cryopreserve, prepare, and distribute highly relevant research lines worldwide. Whether you require custom genetically engineered, cell or tissue engrafted models or traditional models, Taconic's scientists will partner with you to rapidly and efficiently deliver the highest quality models.

TALK TO A SCIENTIST

Our scientific teams are happy to meet and talk with you about the most efficient way to achieve your study goals. Working in partnership with clients the world over, our scientific teams offer expert advice that can help you speed up your research and reduce your overall costs.

TALK TO A REPRESENTATIVE

For general information, you can talk to a member of our customer service team. Our customer service team is here to help you make the right decisions and get the models you need fast. Contact us at **info@taconic.com**

VISIT TACONIC.COM

For more information on the entire Taconic portfolio of products and services designed to help further your research, visit **Taconic.com**

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