

Model Creation Services – Europe

Effective research depends on finding the most relevant model for your application. Whether you are involved in academic research or drug discovery and development, the Charles River team can help you to select, customise and maintain the right model for your studies. In addition to breeding and housing, embryology and genetic testing services, we are now able to offer model design and creation through our strategic alliance with PHENOMIN-ICS, a leader in functional genomics. This new partnership creates a complete, flexible solution for our European clients who need transgenic mice and rats.

Together, our combined *in vitro* and *in vivo* expertise provides an optimal environment for creating, characterising, preserving and distributing your transgenic lines. Our increased capacity enables us to offer you shorter timelines, and a dedicated project manager keeps you informed of the status and progress of your project.

Mouse and Rat Model Creation

Our scientists will work with you to determine the best option(s) for creating your custom model. We currently offer the following methods, which may be employed singularly or in combination.

- ES cell-targeted transgenesis (mouse only)
- CRISPR/Cas9 genome editing
- Random DNA insertion (mouse only)

Breeding and Associated Services

Once your models are in place, our associated services can help you to preserve and protect your investment.

- Cryopreservation and recovery
- SPF or SOPF cohort generation
- Genetic characterisation

Model Validation and Analysis

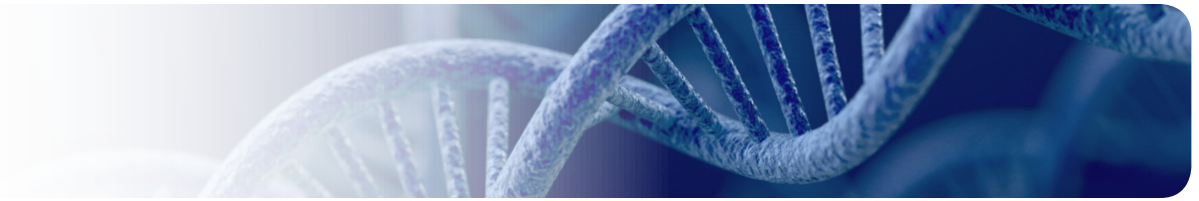
Our animal model experts will design and perform the relevant studies and tests allowing characterisation of your model.

- Molecular characterisation
- Clinical phenotyping

Our Promise

With a commitment to scientific excellence and superior service, we guarantee:

- Generation of chimeras
- ES cell germline transmission (when a proprietary line is used)
- Adherence to project timelines
- Confidentiality
- Exclusivity of intellectual property
- Breeding under VAF+ /SOPF
- Secure animal delivery worldwide



Why Choose Charles River & PHENOMIN-ICS?

For decades, our clients have entrusted us with the breeding and housing of their priceless research models, freeing up valuable resources in order to focus on their research. Our partnership with PHENOMIN-ICS gives you even more reason to rely on Charles River for your genetically engineered model needs. With our ability to provide custom model creation and support services, you can:

Benefit from our well-established platforms

- More than 2,000 models generated to date
- Top market ES germline transmission performance
- Extensive experience with IMPC ES clones
- Highly-experienced team
- Large capacity

Rely on our secured process

- AAALAC-accredited facility
- Strict biosecurity protocol
- Secure global animal delivery
- Extensive quality controls
- Panel of license including CRISPR/Cas9

Personalise your project with our large portfolio

- SOPF mice
- Varied genetic backgrounds available (CRISPR & ES-based transgenesis)
- Access to JAX™ Mice and PHENOMIN zoo
- Large panel of validated services and tests

Resources and guidelines

- PHENOMIN-ICS creZoo
<http://mousecre.phenomin.fr/>
- PHENOMIN-ICS NR zoo
<http://www.ics-mci.fr/en/resources-and-technologies/nuclear-receptor-zoo/>
- Guidelines for using the Cre/Lox system in mice
<http://mousecre.phenomin.fr/guideline>



BASIC RESEARCH	DISCOVERY	SAFETY ASSESSMENT	CLINICAL SUPPORT	MANUFACTURING SUPPORT
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