



RESEARCH MODELS AND SERVICES

Model Creation Services: CRISPR/Cas9 Genome Editing

Available Options:

Package I

- Design and synthesis of CRISPR/Cas9 reagents
- Direct injection into 250 embryos or ES cell transfer into 80 blastocysts
- Reimplantation into VAF/Elite® foster females
- Husbandry and weaning
- VAF/Elite® health report
- Delivery of chimeric mice

Package II

Includes package I services as well as:

- Breeding to F1 generation
- Sample collection and screening up to 40 mice for ES cell and 50 mice for direct injection
- Delivery of heterozygous F1 mice

Effective research depends on finding the most relevant model for a given application. Charles River helps clients select, customize, create and maintain the right model for studies using the latest CRISPR/Cas9 technology. In addition to direct injections, breeding and housing, embryology, and genetic testing services, we now offer model design and creation through our strategic alliance with Mirimus Inc., a leader in genomic engineering. This new partnership creates a complete, flexible solution for our North American clients to create CRISPR models. Together, our combined *in vitro* and *in vivo* expertise provides an optimal environment for creating, characterizing, preserving and distributing genetically engineered mouse models.

Do I need ES cell or direct embryo editing?

Our model creation service is available using a variety of strategies that employ CRISPR/Cas9 technology. Our scientists work with clients to determine which technique is best suited to achieve their goals. When needed, a combination of techniques may be applied.

Do I need to further modify an existing line?

Need another gene knocked out or mutation knocked in? We can perform targeting in your transgenic line to insert additional modifications.

All services use Charles River's VAF/Elite® foster females and include expert animal husbandry and weaning of the resulting chimeric or founder mice. Extended packages include breeding up to the F1 generation along with sample collection and screening of a pre-determined number of mice.

EVERY STEP OF THE WAY