

Rederivation Methods...What's the Difference?

Charles River Laboratories is pleased to offer a choice in rederivation services—Standard Rederivation or Rapid Rederivation. Standard Rederivation offers verification of post rederived health status, while Rapid Rederivation offers a significantly reduced price and timeline. We have established these services to meet your specific needs and project time frame.

Standard Rederivation

Animal Requirements - Mice

- 2 proven breeder males (less than 6 months of age)
- At least 10-15 females (3-4 weeks of age)

Animal Requirements - Rats

- 4-5 proven breeder males (less than 6 months of age)
- At least 10-15 females (10-12 weeks of age)

Procedure

- Upon arrival, all animals will be transferred into the biosecurity of a flexible film or semi-rigid isolator
- Males will be bred with superovulated females for collection of preimplantation stage embryos
- Embryos will be transferred to recipient females who then carry and deliver the rederived offspring
- 3 embryo transfers will be performed
- All recipient females used for rederivation efforts are reared within an isolator environment

Health Monitoring

- Comprehensive Health Monitoring (serology, bacteriology, pathology, and parasitology) and Helicobacter PCR will be performed on recipient females

Deliverable

- Following rederivation, Charles River will return to you a minimum of 3 rederived breeding pairs
- Pre-rederived colony will be terminated when the health status of the rederived colony is confirmed
- Charles River cannot guarantee the zygosity of the rederived offspring

Timeline

- 1 week to acclimate and set up matings
- 2 weeks of embryo collections and transfers
- 3 weeks gestation
- 3 weeks weaning
- 2 weeks to receive approved health reports

Total time is approximately 11 weeks

Rapid Rederivation

Animal Requirements - Mice

- 2 proven breeder males (less than 6 months of age)
- At least 10-15 females (3-4 weeks of age)

Animal Requirements - Rats

- 4-5 proven breeder males (less than 6 months of age)
- At least 10-15 females (10-12 weeks of age)

Procedure

- Upon arrival, all animals will be transferred into the biosecurity of a flexible film or semi-rigid isolator
- Males will be bred with superovulated females for collection of preimplantation stage embryos
- Recipient mothers will be maintained in a sterile isolator for 2 weeks post embryo transfer
- 3 embryo transfers will be performed
- All recipient females used for rederivation efforts are reared within an isolator environment

Health Monitoring

- Health monitoring will not be performed on embryo transfer recipients
- We cannot guarantee the health status of the rederived litters

Deliverable

- Following rederivation, Charles River will return to you at least 2 visibly pregnant females
- The rederivation is considered complete when the recipient females leave Charles River
- Pre-rederived colony will be terminated 7 days following the shipment of pregnant females
- Charles River cannot guarantee the zygosity of the rederived offspring

Timeline

- 1 week to acclimate and set up matings
- 2 weeks of embryo collections and transfers
- 1 week post surgery recovery of embryo transfer recipients and to coordinate shipping arrangements
- 1 week to ship visibly pregnant (10-14 days gestation) females

Total time is approximately 5 weeks