

# UCL Transgenic Service Rederivation Request Form

## ***User details***

***Date Submitted***

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Name: \_\_\_\_\_  
Department: \_\_\_\_\_  
Institution address: \_\_\_\_\_  
Email: \_\_\_\_\_  
Telephone: \_\_\_\_\_

## ***Strain Information***

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Strain or gene name: \_\_\_\_\_  
Jackson MGI no.(if available) \_\_\_\_\_  
Genetic Background of strain: \_\_\_\_\_  
Genotype (homo, hetero): \_\_\_\_\_  
Backcross generation (if known): \_\_\_\_\_ Coat colour: \_\_\_\_\_  
Known fertility problems: \_\_\_\_\_  
Adverse Phenotype: \_\_\_\_\_  
Severity limit: \_\_\_\_\_  
Details of mutation: \_\_\_\_\_  
Justification for use:

Genotype/strain of female mice to be used (WT, hetero, hom) \_\_\_\_\_  
No. of males available: \_\_\_\_\_ DOB of males: \_\_\_\_\_ Proven fertility? \_\_\_\_\_  
Project licence covering strain: \_\_\_\_\_

## ***BSU Contact Information***

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BSU staff responsible for the line: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Contact email: \_\_\_\_\_

## ***Administrative and financial information, please fill in:***

Customer code: \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_ Suffix: \_\_\_\_\_  
Project code: \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
Animal code: \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
BSU of Destination (specify if UCL or not) \_\_\_\_\_  
Health report attached? Yes / No  
Date started: \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

**The above customer code will be charged for the rederivation on the 01 suffix unless otherwise specified.**



## MOUSE PASSPORT

Exact Nomenclature:

LAMIS code:

Abbreviation:

MGI Number:

Background strain:

Number of backcross generations:

Establishment of origin:

Immune status:

References & guidance notes:

Coat colour/s:

### Genotype

Genetic modifications:

Is the transgene / mutant allele maintained homozygous, heterozygous or hemizygous?

If the strain carries more than one transgene and or mutant allele, give full details:

Do you know if the transgene or mutant allele is autosomal, X-linked or Y-linked?

## Phenotype

Phenotypic and/or physiological abnormalities i.e. breeding performance:

Visible phenotypes:

Severity limit:

Behavioural Traits i.e. aggression or over grooming:

## Breeding

Breeding scheme used to maintain the strain e.g. Het x Het:

Normal litter size:

Normal number of litter at weaning age:

Expected postnatal mortalities:

Expected pre weaning mortalities:

Special husbandry requirements if any:

## Administration

Is there an MTA in place?

Justification for use of this strain:

This line will be entered onto the UCL shared mouse strain database. If you do not wish for this line to be shared, please specify why this is the case:

Any other relevant information regarding this strain:

Name:

Date:

PPL code:

User code:

Transgenic Services use only

Rederivation date:

Cryopreservation date:

Phenotype assessment period:

P Block Id and location:

Last updated (name & date):

# **REDERIVATION OF MOUSE LINES**

## **Generating embryos**

### **Introduction**

The purpose of rederivation is to eliminate unwanted pathogens and provide mice with a specific pathogen free (SPF) status to the research community, resulting in benefits to animal welfare and scientific outcomes. Mice with unsatisfactory health status are used to produce pre-implantation stage embryos, which are washed, and implanted into SPF recipient females. The Transgenic service can produce SPF pups, ready to move into a barrier facility, 11-17 weeks after the stud males have been received.

### **Home Office licensing**

Rederivation work at UCL is carried out under the Transgenic Service project licence (PPL 70/8937) which allows importation/rederivation of genetically modified strains, without needing new Home Office approval. Please ensure that (if necessary) your project licence is amended in good time to cover the new strain, amendments must be submitted 4-6 months before the start of the project.

### **Animals required for rederivation**

The aim is to produce around 50 embryos per line and transfer into 3-5 pseudo-pregnant females. This should produce enough offspring of the required genotype to start a new colony. You will be required to provide 4-6 young adult stud males, ideally 2-4 months of age.

Ideally these males will be mated to a standard wild type strain (e.g. C57, CD1) which will be supplied by us. However, if you wish to rederive a homozygote line, we will need you to provide 12-15 females at 3-5 weeks old.

### **Procedure for producing embryos for rederivation**

A batch of females will be super-ovulated or naturally mated with the stud males for three weeks or until desired number of embryos is transferred. Since superovulation is strain-dependent, the yield of embryos for rederivation is not always predictable.

Pups will be biopsied for genotyping between 10-14 days and foster mother will be sent for screening. Serology results indicate clean health status; pups are released for the investigator to use. The entire process takes a minimum of 11 weeks.

### **Special notes**

If the males provided fail to mate after 3 attempts, the investigator will be notified.

Additional charges will be applied if a strain which responds poorly to mating/superovulation is used. The user will be notified after three unsuccessful attempts (i.e. poor embryos quality produced each time)

If the foster females fail to deliver live pups, the process will be repeated at no additional cost (other than the cost of more female egg donors, if needed). The investigator must inform the facility if the strain exhibits any severe defects or lethality, so that the pups can be properly monitored.

If the foster females fail to deliver pups of the desired genotype after three litters, the process will be repeated at no additional cost, but only after the investigator has done appropriate genetic testing on the supplied stud males to confirm their genotype and their ability to detect the gene(s) in question.

### **Fees payable by Users**

**Rederivation charge = £1500** per strain. The fee includes purchase and maintenance of mice needed for rederivation (wild-type females) and maintenance of the newly generated animals until weaning. The fee will cover all procedures carried out by TG Service to establish the rederived stock (to the embryo numbers indicated above). The fee does not include maintenance of the stud males; these will remain under your customer code until the project is complete. The cost will be charged to the above Customer code with associated grant code unless an alternative is indicated. External customers will need to supply an invoice address and order number.

We cannot initiate a project of rederivation if you do not supply your UCL Customer Code, if unsure, please ask the NACWO of your unit.

**Recovery of a cryopreserved strain to generate live offspring = £1500 (£2000 for IVF).** This charge will apply whether the procedure is intended to generate live born mice for experiments (i.e. to recover the strain) or whether it is an “in vivo quality control” procedure. The fee does not cover shipment and you will be required to arrange it with the supplier. However, we should be used as point of contact. Delivery address and point of contact should be:

FAO:

Transgenic Service  
UCL Clare Hall Laboratories  
Blanche Lane  
South Mimms  
Potters Bar  
Hertfordshire  
EN6 3LD  
United Kingdom

**Note: Non-UCL based institution and/or scientist will have to add 20% and VAT to the price of the service.**