

# Murine Targeted Genomics Laboratory Requisition

Mouse Biology Program  
University of California  
Suite 400, 2795 Second Street  
Davis, California USA 95618  
Tel: (530) 757-3191  
Fax: (530) 757-3284

## Pronuclear Microinjection Service

### The investigator's responsibilities are:

(For constructs generated in PI's lab only. For construct generated in MMCL, skip 2-3.)

1. To fill out pronuclear microinjection request form that is signed and dated.
2. To provide 5 to 10ug (at 50ng/ul) of a transgenic construct released from the vector for pronuclear injection and an image of the transgenic construct ran on a gel. The gel image should be clear.
3. If it is a BAC or YAC construct, the PI is responsible to purify and determinate the construction following the protocol provided by MTGL.
4. To provide a description of the DNA fragment, including restriction map and a brief description of the intended experiment.
5. To show a working genotyping protocol that can amplify a single cope of transgene if the PI's lab will perform the genotyping.
6. If using guaranteed service, transgene sequence along with this form must be sent to the Murine Genetic Analysis Laboratory at [mgal@ucdavis.edu](mailto:mgal@ucdavis.edu) for PCR development or a working PCR protocol showing amplification from a 1 copy/genome standard.
7. To inform MTGL of the number of transgenic mice obtained after tail DNA analysis by southern or PCR.
8. To pay per diem and colony management charge after the mice are weaned at 21 days of age. The current per diem is \$1.22 per cage per day, and colony management charge is \$0.50 per cage per day.

### MTGL's responsibilities are:

1. MTGL will perform final purification and dilution before injection. DNA purification charge is \$227 per construct.
2. If it is a BAC or YAC construct, the PI is responsible to purify and determine the concentration following the protocol provided by MTGL. MTGL will dialyze and dilute the construct before injection. The charge is \$227 per construct.
3. For basic service, MTGL will transfer 180 injected eggs, or get 40 live pups, or generate 2 founders, whichever comes first. The definition of "founder" means a mouse born from eggs that underwent pronuclear microinjection of an investigator's one construct, and has at least one copy of the transgene.
4. For guarantee service, MTGL guarantees two founders. For this service, genotyping is to be performed by Murine Genetic Analysis Laboratory (MGAL) at UCD. The PCR set up fee is \$397, and genotyping by PCR per sample fee is \$9. You must send the sequence of the transgene and this request form to MGAL ([mgal@ucdavis.edu](mailto:mgal@ucdavis.edu), fax: 530-757-3284) for PCR development. If you have a working genotyping protocol, MGAL will charge \$61 for protocol incorporation. You must send your PCR protocol, primer sequences, and expected band size to MGAL for protocol incorporation.
5. We do not offer guaranteed service if your project involves co-injecting two or more constructs to make multiple transgenic mice due to the DNA concentration for each construct is only half of the concentration we use for standard procedure. For co- injections, mice with one transgene insertion will be considered a founder.
6. To provide tail samples from the pups for screening, and house pups till weaning (21 days old).

### Charge for service:

(Price quoted here are for UC investigators only. For off campus PIs, a 44.4% NUD will be added. )

Donor	B6D2F1 or FVB	C57BL/6
Basic service	\$3985	\$6557
Guarantee service	\$5965	\$8735

Final DNA purification                      \$296/construct

**The investigator requesting microinjection understands and agrees to the terms and conditions outlined above.**

**Signature**

**Date:**

**The request from will not be accepted without the investigator's signature.**

## Pronuclear Microinjection Request

### PI DETAILS:

PI's first name:  
PI's last name:  
Phone #:  
Fax#:  
E-mail address:  
Address:

### CONTACT DETAILS:

Contact's first name:  
Contact's last name:  
Phone #:   
Fax#:  
E-mail address:

Membership: UC Davis Cancer Center \_\_\_\_\_ CEHS \_\_\_\_\_ None \_\_\_\_\_  
Is this cancer related research (for cancer center member only)? Yes \_\_\_\_\_ No \_\_\_\_\_

### BIOLOGICAL USE AUTHORIZATION (BUA) INFO:

BUA # \_\_\_\_\_ Approval date: \_\_\_\_\_  
Animal use and care protocol number: \_\_\_\_\_ Expiration Date: \_\_\_\_\_  
(If no animal use and care protocol approved, please fill out the amendment from required by EHS)

### ACCOUNT DETAILS:

Billing contact:  
Phone#:  
Email address:  
Billing address:

**For UCD Campus PI:** please provide 4 Digit recharge number:

**For other UC campus PI:** please provide Intercampus String:

**For off Campus PI:** please provide Purchase Order (PO) #:

Please fax a copy of the PO to MTGL (530-757-3284).

If you would like to pay by credit card. Please contact Brandy Thomas ([brthomas@ucdavis.edu](mailto:brthomas@ucdavis.edu)) by email or phone 530.757.3322

**\*ALL FIELDS MUST BE COMPLETED BEFORE WE CAN PROCESS YOUR ORDER\***

### FOR MTGL USE ONLY:

**Date request form received:**  
**Request form received by:**  
**EH&S Approval date:**

**Billing date:**  
**Order number:**

**Comments:**

## **Pronuclear Microinjection Request Form**

### **GENERAL INFORMATION:**

Type of service: Basic: \_\_\_\_\_ Guarantee: \_\_\_\_\_

Preferred mouse genetic background:

B6D2F1 \_\_\_\_\_ FVB/NJ \_\_\_\_\_ C57BL/6J \_\_\_\_\_ Other \_\_\_\_\_

Animal Housing: Barrier housing (M3) \_\_\_\_\_

### **CONSTRUCT INFORMATION:**

Construct Name: \_\_\_\_\_

Construct type: standard DNA: \_\_\_\_\_ BAC: \_\_\_\_\_ YAC: \_\_\_\_\_

Construct Size : Total: \_\_\_\_\_ kb Transgene: \_\_\_\_\_ kb

Promoter: \_\_\_\_\_

Circular plasmid preparation method: CsCl<sub>2</sub> banding \_\_ Qiagen column \_\_ Other \_\_\_\_

Enzyme for releasing transgene: 5' end \_\_\_\_\_ 3' end \_\_\_\_\_

Transgene isolation method: \_\_\_\_\_

Transgene isolation date: \_\_\_\_\_

Transgene Concentration via OD<sub>260</sub>: \_\_\_\_\_ ng/ul (DNA should be dissolved in TE, pH7.5)

Volume: \_\_\_\_\_

### **GENOTYPING INFORMATION:**

Lab for genotyping: PI's lab: \_\_\_\_\_ MGAL: \_\_\_\_\_ Other: \_\_\_\_\_

Genotyping method: PCR \_\_\_\_\_ Southern blot (PI only) \_\_\_\_\_

For genotyping by MGAL: PCR development \_\_\_\_\_ PCR protocol incorporation \_\_\_\_\_

**AMENDMENT FORM REQUIRED BY EHS**

This amendment is to be filled out by the PI making the request and submitted to the UC Davis IACUC at: [iacuc-staff@ucdavis.edu](mailto:iacuc-staff@ucdavis.edu). (Note: please cc to: [xinyu@ucdavis.edu](mailto:xinyu@ucdavis.edu))

Prior to creation of any transgenic animals covered under this protocol (#12617), this amendment must be submitted to and approved by the UC Davis IACUC.

(If you already have an IACUC-approved protocol that covers this transgenic line in mice, please provide the protocol number to MTGL and do not complete this form).

**PI Name:** \_\_\_\_\_

**Date Submitted:** \_\_\_\_\_

**PI Animal Use Protocol # (if applicable):** \_\_\_\_\_

**a) Description of Gene of interest:**

**b) Objective:** Please provide a justification for the creation of the transgenic line.

**c) Potential Adverse Effects:**

Please describe any potential adverse effect that could be associated with the desired genotype, if known.

Please email or fax your request form to Sasha Wirth ([sswirth@ucdavis.edu](mailto:sswirth@ucdavis.edu)) at 530-757-3284. Thank you!