

Center for Functional Genomics
Transgenic Mouse Facility, Room 332

Phone: (518) 591-7213	University at Albany
Fax: (518) 591-7211	East Campus
E-mail: avperez@albany.edu	One Discovery Drive
WWW: http://www.albany.edu/genomics/	Rensselaer, NY 12144-2345

Instructions for DNA Preparation, Cleaning and Shipping

1. The whole DNA plasmid prep can be made either by CsCl or, using a Qiagen or Promega plasmid prep kit. Check your quality of the DNA prep by running it on a gel.
2. To purify the DNA construct from vector sequences digest the DNA with the appropriate restriction enzyme(s).
3. The linearized DNA construct to be microinjected should be isolated by gel electrophoresis. We recommend cleaning the DNA twice with Phenol/Chloroform and ethanol precipitation.
4. To concentrate it, we recommend an ethanol precipitation and twice wash with 70% ethanol (500-1000 μ l).
5. After drying resuspend your DNA in TE.
6. At this point we would ask you to quantitate your DNA by gel. You will submit a picture of this gel with your DNA and the appropriate markers. The DNA concentration should be:

For transgenic constructs: 10-20 ng/ μ l in a volume of 50 μ l of TE.

For gene targeting: 1 μ g/ μ l and a total of 100 μ g/tube.

Investigators could also choose to send us the DNA so that we make the prep, digest, quantitate and purify the DNA construct for \$125.00. For this we will need the map indicating the enzyme(s) used for linearization. Alternatively, investigators could choose to send their own plasmid preps and have us digest and purify the DNA fragment for \$75.00.

In order to do this:

For transgenic constructs: please send 5 μ g of plasmid DNA with a picture of the gel with the quantitation of the plasmid DNA prep. The CFG will also need a map indicating the enzyme(s) used for linearization.

For gene targeting: please send 200 μ g of plasmid prep with a picture of the gel with the quantitation of the DNA prep. The CFG will also need a map indicating the enzyme(s) used for linearization.

7. The DNA aliquot can be shipped in TE solution in dry ice overnight.