Preparation of DNA for Pronuclear Transgene Microinjection:

There are many published methodologies to isolate highly purified DNA fragments for microinjection. These often include cesium chloride double-bandings, and/or electro-elution followed by hydroxyapetite column purification. While the purity of the DNA is a key variable in the successful generation of transgenic mice, these elaborate, time-consuming procedures are not obligatory. The Core recommends the use of the QIAquick Gel Extraction Kit for purifying transgene DNA. A simple protocol is provided with each kit, and the kit is available in the Nucleic Acid Core Facility located on the 3rd Floor of the UMASS Medical School Building in the Department of Cell Biology. The kit may also be ordered direct from Qiagen (Catalog no. 28704).

DNA may be recovered from the QIAquick column in either sterile TE or water. The Core requires at least 20-40 ul at a final concentration of 50-100 ng/ul.