

## IACUC: Mouse/Rat Tail Biopsy Guidelines

Tail biopsy is a common technique for collection of DNA from mice. Tail biopsy technique must be described in the IACUC-approved breeding protocol. Any deviation(s) from the guidelines listed below must be detailed in the IACUC protocol and approved by the IACUC prior to implementation.

1. Ideal age for biopsy is 10-21 days. Anesthesia is required for biopsy of animals older than 21 days of age. Consult the veterinarian or veterinary technician for guidance/assistance if your litter is older than 21 days of age (i.e. a missed litter).
2. Manually restrain the mouse and ear-punch or ear-tag to identify the animal.
3. Use scissors that have been autoclaved or cold-sterilized or sterile blade prior to use on each litter. Between animals of the same litter, wipe the scissors with Virkon™ or other disinfectant.
4. No more than 5 mm of the tail should be sampled. Place tail-tip into collection tube.
5. Return animal to the cage and watch for bleeding. If bleeding is noted, apply gentle pressure to the biopsy site or apply silver-nitrate.

Suggested reading:

[NIH OACU: Guidelines for the Genotyping of Mice and Rats](#)

Pinkert CA. Transgenic Animal Technology: Alternatives in Genotyping and Phenotyping. Comp Med 2003; 53(2):126-139.

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