OBJECTIVE: To define the conditions under which anesthesia is a requirement for mice from which tail tissue is being collected for DNA analysis. (Note: The investigator should consider alternatives to tail biopsy for DNA analysis. For example, if mice are ear notched for identification, the tissue removed may be sufficient for DNA analysis and eliminate the need for this procedure.)

RESPONSIBILITY: The Investigator is responsible for ensuring that each individual obtaining tail samples from mice follows this policy.

PROCEDURE:

I. Tail biopsy of young mice is less painful due to the delayed calcification of bone in the tail area. Therefore, sampling of younger mice is preferred. No anesthesia is required if:

   An animal is younger than 21 days of age and no more than 10 mm of tissue is being collected from the tip of the tail. In most cases, 5 mm of tissue is sufficient for analysis.

II. Scientific justification in the protocol and general anesthesia is required if tail sampling is conducted under any ONE of these conditions:
   A. The animal is older than 21 days.
   B. More than 10 mm of tissue is taken.
   C. Tissue is being collected from an animal more than once.

III. Application of a topical anesthetic (i.e., Bupivacaine) should be performed following the amputation of the tail tip to relieve pain associated with this procedure.

IV. Pressure on the open wound or use of a chemical coagulant should be used to ensure hemostasis following amputation of the tail tip.

V. Tail sample collection should be performed only once or a maximum of twice.
Reference:


Date approved: December 2003
Last review date: February 2015