

University of Colorado at Boulder
Office of Research Integrity
Institutional Animal Care and Use Committee
SOP # 24

Title: Tail Clipping for Identification and Genotyping in Mice

INTRODUCTION

The Institutional Animal Care and Use Committee (IACUC) maintains oversight review for federally mandated rules and regulations with regard to animal research, ethics, misconduct and biomedical research for the University of Colorado Boulder.

POLICY

This policy is intended to provide information on the requirements of tail clipping and to establish procedures to be followed.

- Tail clipping may only be performed if it is approved in your IACUC protocol.
- Tail clipping of rodents is often used to obtain tissue samples for analysis.
- If a one-time sample of only 1 to 2 mm of tail tissue is needed, and the rodent is 21 days of age or less, then no anesthesia is required.
 - This procedure is a CU Boulder pain or distress category "C".
- If 2 mm to 10 mm of tail tissue (or repeated samples) are needed, or if the animal is 22 days of age or older, then anesthesia is required.
 - This procedure is a CU Boulder pain or distress category "D".
 - Post-procedural analgesics are also required in this latter case, unless adequate scientific justification for no analgesics is provided by the investigator.
 - Scientific justification for taking more than 2 mm of tail tissue or performing the procedure on an animal 22 days of age or older must be provided.
- An alternative to the tail clip procedure is an ear punch or the saliva swab method (Irwin *et al.*, (1996). Identification of transgenic mice by PCR analysis of saliva. *Nature Biotechnology*, 14(9): 1146-1148). This method is recommended when only small amounts of tissue are needed (i.e. for PCR analysis). Both of these procedures can be performed at any age of the animal.
- Any deviation from the policy concerning tail clipping will be considered and reviewed by the IACUC on a case by case basis with supporting scientific justification.

Per regulatory requirements, failure to comply with this policy may result in notification of your funding agency (e.g. NIH) and regulatory agencies (e.g. USDA) that your research has violated federal and/or local policies regarding the humane use of animals. This notification may affect continuous funding of your animal-related research. Further, depending on the violation, you may be required to take additional training and/or your privilege to conduct animal research at UC Boulder might be temporarily suspended or even completely revoked.