

## Mouse Identification Procedure

**Equipment:** Ear Punch(s)                      Ear Tags                      Microchips  
Ear Punch Chart                      Ear Tag Applier                      Microchip Injection Handle  
DNA Away Soln.                      Microchip Reader  
Beaker for Wash                      Sharps container  
Eppendorf Tubes

**Procedure:** For identifying individual mice with ear punches - Select the mice for identification. Determine the location and number of punches necessary to correspond to the numerical identification required. Scruff the mouse and restrain so that the ears are easily accessible. Place the ear margin in the ear punch so that the hole side of the punch is under the pinna in the location desired. Squeeze the punch closed quickly and firmly. The punches can be either notches or holes based on the number needed. The tissue removed in this process may be collected for DNA analysis. In the case of DNA sample collection for transgenics, the ear punches must be soaked in DNA Away. To prevent rusting and to sanitize between animals, the punch is then thoroughly cleaned with alcohol and dried before using.

For identifying individual mice with ear tags - Select the mice for identification. Select the ear tags to be used. Different strains or investigators may have tags with a specific alphabetic identifier before the numbers on the tags. Gently remove a tag from the cardboard holder and orient into the applier so that the end with the hole is positioned over the notched area of the applier. The pointed end should be opposite the hole. Scruff the mouse and restrain so that the ears are easily accessible. Place the ear between the point of the tag and the hole of the tag being careful to position the tag well into the ear as far from the margins as possible. Firmly squeeze the applier closed. The ear tag will pierce the ear and lock together. Release the applier and the tagged ear will fall out of the applier.

For identifying with microchip implantation - Select the mice for identification. Load the needle containing the microchip into the microchip injection handle. The injection lever should be pulled backward as far as possible prior to loading. The bevel of the needle should be oriented so that the bevel is facing up when injecting. Lock the needle in place by closing the plastic slide. The mouse is restrained in the same manner as for a subcutaneous injection. Remove the plastic needle guard. The needle is advanced under the skin parallel to the spine and away from the skull to avoid injury to the animal. The injection lever is pushed forward to advance the microchip out of the needle and under the skin. The microchip can be felt with the fingers as it is implanted. Grasp the skin around the needle as the needle is withdrawn to prevent the microchip from slipping out. The skin must be pinched closed at the injection site to assist in sealing the needle puncture. The needle is then discarded into a sharps container. The injection handle can then be reloaded for another animal. If a microchip comes out of the needle or out of the skin, it CANNOT be replaced in the needle for re-injection.