

## **Tail Blood Collection**

<u>Note:</u> Blood collection is done on GD15 before the beginning of the light cycle or after the light cycle has been completed (between 5 and 6 AM or between 7 and 8 PM). This is because the rats commonly eat most in the dark and provides an accurate measurement of BAC. All procedures should be completed in the animal care unit.

## 1 MATERIALS

- Towel
- Scalpel
- 1.5ml eppendorf tube
- Cauterizing tip/swab

## 2 Procedure

- 1. Pick up the female and handle her gently so as not to stress her.
- 2. Place the female on the towel facing towards your body with her tail facing outward. Secure the body of the female either in the towel or in your arms.
- 3. Hold the tail against the towel on a hard surface and cut through the tail at the very tip, holding the eppendorf tube to collect blood. The female will jump when you make the cut, so it is important to brace the animal.
- 4. With your thumb and forefinger gently squeeze the tail from the base to the tip, using your thumb to push the vein on the underside of the tail. This is essentially milking the vein.
- 5. Collect approximately 1mL of blood in the eppendorf tube.
- 6. When finished blood collection, use a cauterizing tip to cauterize the wound. The wound should no longer be actively bleeding. Be careful not to disturb the clot.
- 7. Return mother to cage.

Note: Monitor the female over the coming days to ensure that the tail has healed properly.

## With Blood Sample

- 1. Label clearly and refrigerate overnight
- 2. Centrifuge at 3000g for 10 minutes
- 3. Collect the serum (supernatant) and discard the pellet.
- 4. Decant into a clean, clearly labeled eppendorf tube and store at -20 until you are ready to analyze the BAC.