How to collect mouse urine

(1) How to collect fresh urine: Method of forced urine collection by sacral vertebra stimulation

Fix the position of mouse: Place the lid of the cage on a stainless steel tray.

On the lid, grasp mouse from behind and seize the skin around neck and scapular region using your thumb and index finger of your left hand and hold the mouse.

Mouse may urinate because of stress by holding or abdominal pressure.

Collect urine using a pipette if urine remains on a tray or a wire mesh. Collect urine using a watch glass if urine remains the urethral meatus.

Lift the mouse up and caracole it and turn the ventral side of the mouse toward yourself. Hold the tail of the mouse by pushing the tail of the mouse using your palm, ring finger and little finger.

In the case of female mouse, lower the head slightly downward and hold it to avoid entering the urine into the vagina.

Procedure for urine collection

1) Slowly rub the lower abdomen of the mouse (above bladder) with some pressure toward the urethral meatus using your right hand index finger to induce pass the mouse’s urine.

2) Receive urine on a watch glass

If the mouse does not urinate, the method of fixing the mouse or making pressure on the mouse for urinating may not be adequate, or urine may not be accumulated enough in the bladder of the mouse. In that case, it may better to start again from the fixing the mouse.
Try again after 30-60 minutes later if mouse still does not urinate.

Pay attention for avoiding contamination with feces, as mouse may evacuate feces simultaneously with urination.

(2) Method of urine collection by injection of bladder.

This is a method of aspirating urine directly from the bladder using a syringe with an injection needle after laparotomy at the time of dissection of the animal.

This method can be adopted for various types of animals, however, special attention is required for avoiding contamination with other fluids such as blood during the collection.

Attention:
The method above is used at IBL and we successfully collect mice urine sample using the method, however IBL is not responsible for any outcome because of applying the method by any third party.