

## Mouse Tail Vein Training Simulator Instruction Manual

### 【Product Set Contents】

1. Mouse tail vein simulator 1 pc.
2. HUMANEWAY 25g winged infusion set for laboratory animals 5pcs
3. Blunt needles 2 pcs.

### 【Directions For Use】

#### ● For Intravenous Tail Vein Injection Training

1. Attach the blunt needles to each end of the tubes of the mouse tail simulator.
2. Prepare simulated blood to be used for training and draw into a syringe. Connect the syringe to either one of the blunt needles, and fill tube with simulated blood.
3. Draw desired fluid to be administered to a syringe and connect it to the HUMANEWAY winged infusion set.
4. Insert the needle of the infusion set into either one of the tail veins.
5. After pulling the inner tube of the syringe to check for a flash of blood, inject fluid.  
(If simulated blood does not enter the vein, this is usually a sign that the needle is not inserted into the blood vessel properly.)

#### ● For Tail Vein Blood Collection Training

1. Attach the blunt needles to each end of the tubes of the mouse tail vein simulator.
2. Connect a syringe filled with simulated blood to either one of the blunt needles and fill tube with the blood.  
(Leave the syringe attached to the needle after inserting the blood.)
3. With a clip\*, hold the other tube in place.  
\*If fluid leakage becomes an issue after repeated use, avoid using clips or other means to hold the tube in place. Blood withdrawal training can be performed even if the tube is not held in place.
4. Connect a hematocrit capillary tube to the HUMANEWAY infusion set.
5. Insert the needle into the tail vein that the syringe is attached.
6. After inserting the needle, slowly push out the inner tube of the syringe that is attached to the tip of the tube and let the simulated blood flow in.
  - 1) If the simulated blood flows into the hematocrit capillary, blood withdrawal is properly performed.
  - 2) If the simulated blood does not enter the hematocrit capillary, the withdrawal is not properly performed, in which case the needle should be reinserted.\*\*\*\*When performed on a living animal, the blood flows into the blood vessels by the animal's blood pressure when the needle enters the blood vessels,.

#### ● Cleaning and Maintenance

1. After filling the syringe with tap water and connecting it to the blunt needle at the end of the tubing, rinse out the simulated blood in the tubing. Repeat until no blood is remaining in the tube and water is clear.

2. After the inside of the tube is clean, send air into the simulated blood vessel (inside of the tube) using an empty syringe and remove the water from the tube. Repeat until no water remains in the tube.
3. Finally, rinse and clean the used blunt needle with tap water.

**【Precautions】**

1. Do not bend tailbone excessively, as the tailbone (the white portion) is located in the center of the mouse tail simulator and bending it too far may lead to deformation).
2. If the needle is inserted into the tube excessively, the fluid may leak when pressure is applied to the tube. The same applies to a living animal, as multiple needle insertions can cause leakage of blood or infusion fluid.
3. The HUMANEWAY infusion set included in this set should only be used for trainings and should not be used on a living animal.
4. This product can be used repeatedly, but tube leakage from frequent use may become irreparable.
5. The hematocrit capillary needed for blood collection training is not included in this set and needs to be prepared separately.
6. If tubes are not properly cleaned after trainings, fluids used for simulated blood may stick to the inside of the tube and clog it. When this happens, the product may not be used until tubes are unclogged.

**【Mouse Tail Simulator Material of Parts】**

1. Tail (body) . . . . . silicone
2. Tube: . . . . . silicone
3. Bone: . . . . . polystyrene
4. Connector: . . . . . nylon