

Mouse Tail Vein Simulator

Humaneway
— with Kindness to animals

Patent Pending

Developed for the training of intra-tail vein injection and blood collection!

ICR Model

CL-4599-1

Mouse Tail Vein Simulator (W)

The veins are easy to see, so even beginners can improve the techniques of blood collection and injection with learning a series of operation.

For beginners are trying it for the first time!

It contributes greatly to the principles of 3Rs including Replacement and Refinement.

For advanced users want to apply it to practice!

When injecting simulated blood

The tail is thinner and colored, so it is more difficult. It is recommended for those who are actually having difficulty with the B6 technique.

Color gradation of C57BL/6 tail

C57BL/6 Model

CL-4599-2

Mouse Tail Vein Simulator (B)



How to use the product scan this!

Feature 1 You can practice injection and blood collection without using animals!

- Ideal for training/practice before using a live animals.
- It contributes significantly to the Replacement (replacement) of 3Rs by practicing without using animals.
- It also contributes to the Refinement (pain reduction) of 3Rs by being able to experience the feeling of injection and blood collection before using an animal.
- Recommended as a educational material for students (beginners).

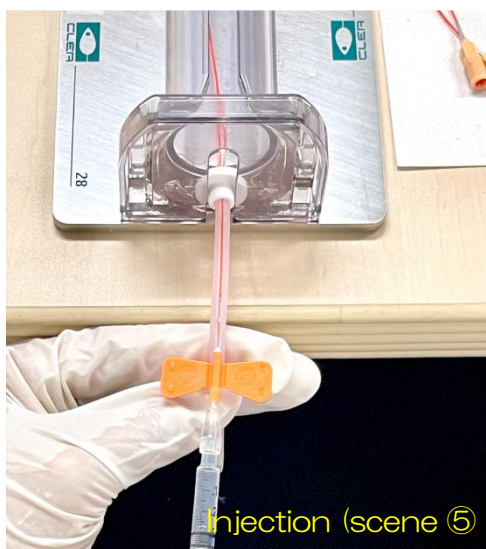
Feature 2 Real size, real treatment feeling!

- Two tail veins (tubes) and one tail bone are built into the tail vein simulator.
- When simulated blood is injected into the tail vein tube, the two tail veins can be visually confirmed.
- The thickness and position of the tail and tail vein are modeled after ICR and C57BL/6.
- As with blood vessel securing in a live animals, the needle tip will smoothly enter the blood vessel when successful.

Feature 3 No place or time restrictions!

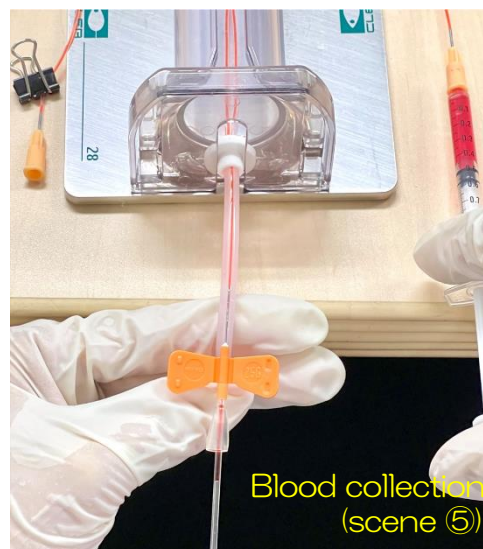
- For training/practice, you do not need to apply for a protocol and purchase can be raise animals.
- Practice is possible regardless of location, such as classrooms or laboratories.
- It is also ideal for training and lectures in large numbers.

Method 1 Intravenous injection method



- ① Fix the simulator to the restrainer.
- ② Inject simulated blood from a non-bevel needle and remove the syringe. * It can also be used in an empty state.
- ③ Set water (simulated drug solution) on the injection needle.
- ④ Insert the needle into the tail vein and confirm reverse blood. If reverse blood cannot be confirmed, the needle is not inserted into the blood vessel.
- ⑤ Administer the simulated drug solution.
- ⑥ If simulated drug solution comes out of the tip of the tube, it is a success.

Method 2 Tail vein blood collection method



- ① Fix the simulator to the restrainer.
- ② Inject simulated blood from a non-bevel needle and dip the other non-bevel needle. * Water can also be used.
- ③ Set a capillary deeply to the winged needle for Laboratory animals.
- ④ Insert the needle into the tail vein.
- ⑤ Slowly push out the simulated blood with a syringe and simulate blood collection by capillary action. * If the needle is not inserted into the vein, the blood cannot be flowed.

Method 3 Clean up after use

- ① Inject water from a non-bevel needle to flush out the simulated blood.
- ② Inject air from a non-bevel needle to dry the tube.

Product number : CL-4599-1 / CL-4599-2
 Product name : Mouse Tail Vein Simulator (W) / (B)
 Set contents : Simulator:1 Non-bevel needle:2
 Winged needle for Laboratory for Mice and Rats: 5 ※Simulated blood is not included.

【Recommended simulated blood】

Food coloring, water-based ink, etc.
 dissolved in water
 (Red or a mixture of red and blue)

【Development cooperation】

Professor Katsushi Kawakami, Department of Mechanical Systems Engineering, Graduate School of Engineering, Yamagata University Under the academic guidance contract, we used 3D printing technology and soft tissue reproduction technology.

~Refinement...Further improvement of technology~

Recommended for use with !

Combines a hematocrit tube a syringe for blood collection/administration! The needle is thin and can be inserted parallel to the tail, so the success rate is increased! It helps to minimize damage to the organism and red Blood cells, and contributes to the improvement of animal welfare.

Winged needle for Laboratory animals
 CL-4598

CL-4903/4904,
 each in 3 sizes
 Restrainer for Laboratory Mice and Rats

Made of PSF and can be sterilized by auto clamp!
 Animals enter the restrainer themselves in a ONEWAY system, which reduces stress. The outlet has no steps, so it prevents animal injuries from happening in advance!

■ Contact and Sales



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