

2.5% Avertin (Anesthesia For Rat)

Description

2.5% Avertin (Anesthetic for Rat) is a sterile solution specifically formulated for short-term anesthesia in laboratory animals, particularly rats. It uses high-purity tribromoethanol as the main active ingredient, with a small amount of tert-amyl alcohol as a solubilizer, and is diluted with physiological saline to a standard concentration of 2.5%. Tribromoethanol is a central nervous system depressant that enhances GABAA receptor—mediated chloride ion influx, inhibiting neuronal depolarization and thereby suppressing neural excitation to rapidly induce sedation and anesthesia. As a fast-acting, short-duration anesthetic, Avertin is widely used in acute experimental procedures on rats, such as surgeries, cardiac puncture, tissue perfusion, and sample collection. The 2.5% concentration is the commonly recommended dose for rats, providing an optimal balance between anesthetic depth and safety.

This product is ready to use that has been sterilized by filtration to ensure safety and stability. It is suitable for direct intraperitoneal injection in research animals, eliminating the need for users to perform additional dissolution or filtration.

Features

- 1. Ready-to-use: use directly and avoid exposure to toxic gases.
- 2. High-purity raw materials: Made with analytical-grade tribromoethanol, sterile saline, and solubilizing agents.
- 3. **No equipment required:** No need for a vaporizer or anesthesia machine, suitable for standard laboratory environments.
- 4. Strict sterility: Prepared by 0.22 µm sterile filtration, suitable for perfusion and other high-cleanliness experiments.
- 5. Stable packaging: Light-protected, cold-resistant storage bottles to ensure product activity and safe use.

Application

For use in rodent (Rat) anesthesia only.

Instructions

Administration route: Intraperitoneal injection (i.p. injection)

Recommended dosage: Approximately 0.6-1 mL/100 g rat body weight

Onset of anesthesia: within 5 minutes

Duration of anesthesia: 20-90 minutes (varies depending on dose and animal condition)

Note: Please adjust the dosage based on the animal's condition and experimental requirements to avoid overdose.

Storage

Store at 4°C protected from light; valid for one year.

Precautions

- 1. Different strains and ages of animals require different doses of anesthetics. It is recommended to start with a low dose and conduct preliminary experiments to optimize the final dosing.
- 2. Use as soon as possible after opening. Prolonged storage may cause precipitation or decomposition of components, resulting in reduced anesthetic efficacy and even peritonitis. Allow the solution to return to room temperature before use. Cloudiness or crystal formation is normal and can be dissolved in a 37°C water bath.
- 3. Within the recommended range, the larger the dose of Avertin, the longer the duration of deep anesthesia and recovery time. A heating pad or heat lamp can help shorten recovery time.



- 4. Avertin is suitable for short-term survival or non-survival surgeries and terminal euthanasia procedures. Adjust the initial dose according to the duration of the procedure, and if necessary, administer approximately one-third of the original anesthetic dose to extend the anesthesia duration.
- 5. Suitable for use in pregnant mice; does not affect pregnancy and has minimal impact on fetuses.
- 6. Do not use Avertin repeatedly on the same animal, as it may cause peritonitis and death. If the animal has been anesthetized with Avertin and has recovered, alternative methods (e.g., isoflurane) should be used for subsequent anesthesia.
- 7. The product is for R&D use only, not for diagnostic procedures, food, drug, household or other uses.
- 8. Please wear a lab coat and disposable gloves.

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