

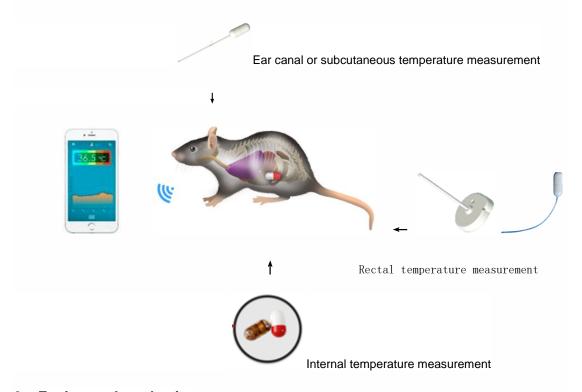
Guide to Measuring Body Temperature in

Mice and Rats

1. Introduction

In the fields of life medicine, pharmacology and other scientific research, a large number of clinical trials are conducted using experimental animals such as mice. It is a global problem for researchers to accurately measure and record the core body temperature of animals during the experiment. Shenzhen Flamingo Technology Co., Ltd. has unique technical advantages in this professional field, providing customers with accurate, reliable, easy-to-use and low-cost core body temperature measurement equipment for mice and rats, which can be worn on the body of the animal and use smart terminals such as mobile phones to monitor and record data in real time.

2. Temperature measurement topology diagram for mice and rats



3. Equipment Introduction

Body temperature measurement: 25 °C \sim 45 °C ± 0.2 °C , $\,$ Wireless transmission distance: $\leqslant\!10$ meters/battery life 30 days

• Measurement recording rate 10 seconds/Mobile APP monitoring • Recorded data can be sent to a specified network address



Capsule Thermometer S V22 3

Rectal Thermometer SV224

Rectal

thermometer for rats and mice

- * The most effective and accurate core body temperature measurement
 * Temperature catheter inserted in the rectum or under the skin * A 1.3mm diameter stainless steel probe is inserted into the anus

4. Measuring gastrointestinal temperature

The capsule thermometer SV223 was implanted into mice and rats to measure body temperature using anesthesia surgery. The operating instructions are shown in Attachments 1&2.



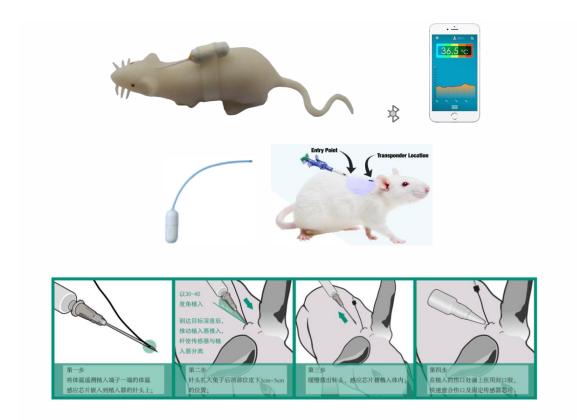
5. Measuring rectal temperature

Using a rectal thermometer SV224, insert the temperature catheter from the anus to a depth of about 3 cm into the rectum, and fix the thermometer to the mouse's tail using masking tape.



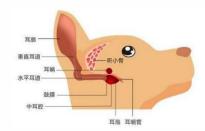
6. Measure subcutaneous or abdominal temperature

Use the rectal thermometer SV224 and implant the temperature probe into the subcutaneous part of the neck of mice and rats with a medical needle. Drop medical glue on the wound to solidify. Finally, use masking tape or 502 glue to fix the thermometer on the outside of the animal. For details, see Appendix 3.



7. Measure ear canal temperature

Cut the hair on the back of the mouse and glue the capsule to the back of the mouse with 502 glues. Insert the temperature catheter into the mouse ear canal through the vertical bend, close to the eardrum (see the figure below), and drip 502 glue to glue the temperature catheter to the skin of the ear.



8. TempView App Operation

-Install the App

The TempView application is only applicable to smartphones with Android operating systems. It is not applicable to smartphones with Apple, Harmony OS, and other operating systems. Please download the application from the following address:

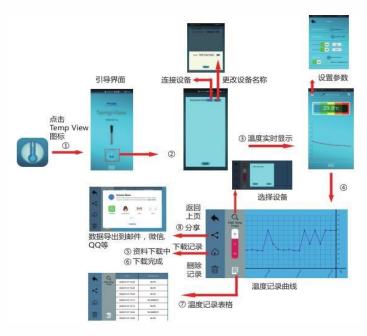
- ① https://www.fmg-tech.com/oid1745038/Software-Download.htm
- ② https://www.pgyer.com/tempview

Scan the QR code with your phone and download our App TempView from Google Play.





-App operation flow chart



- Annex 1 Video tutorial on implanting a capsule thermometer
- Annex 2 Instructions for implanting a capsule thermometer
- Annex 3 Instructions for implanting a temperature catheter into the abdominal cavity

Contact <u>uswww.fmg-tech.com</u>