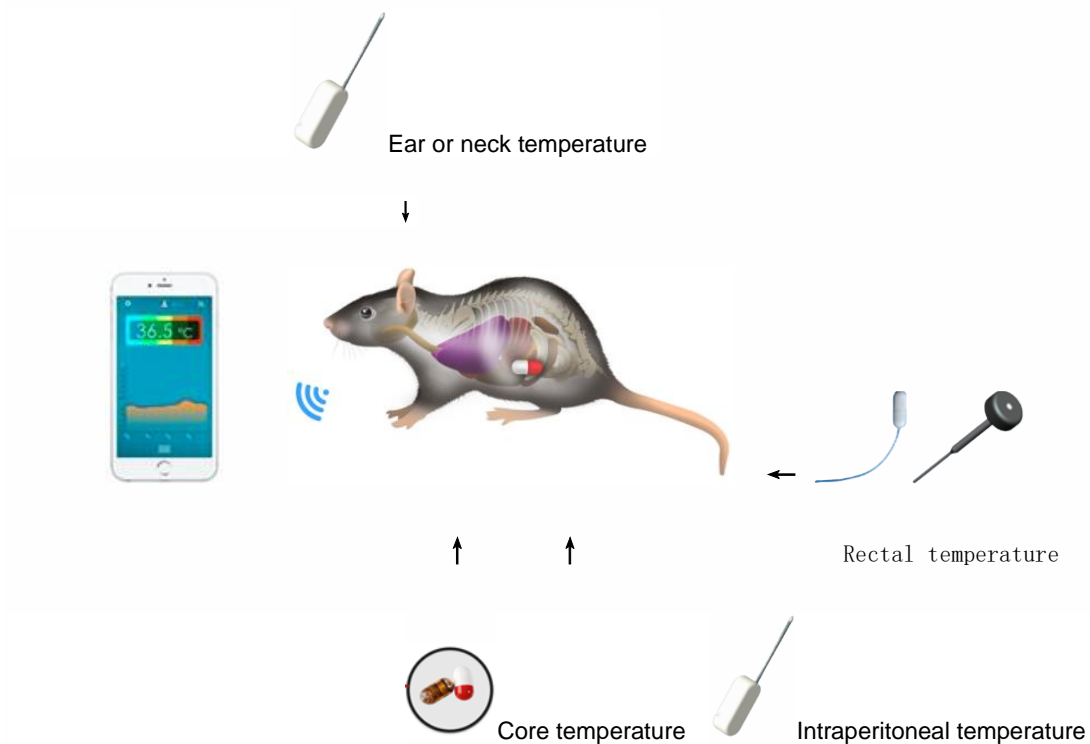


## Mouse Temperature Measurement Guide

### 1、 Introduction

Measuring the core body temperature of mice has long been a difficult problem. In the fields of life medicine, pharmacology, pathology and other research fields, experimental animals such as mice and rats are needed for a large number of clinical trials. Shenzhen FMG Technology company has unique professional and technical advantages in the field of animal temperature measurement, providing customers with accurate, convenient and low-cost core body temperature measurement equipment for mice and rats, and using smart terminals such as mobile phones to monitor and record measurement data in real time.

### 2、 Temperature Measurement Topology



### 3、 Body Core Thermometer

- Measuring range: 25 °C ~ 45 °C ,  $\pm 0.2$  °C
- Monitor multiple terminals, with a battery life of up to 1 year
- Measurement rate 10 seconds
- transmission distance  $\leq 10$  meters
- Recorded data can be sent to a specified network address



**Capsule Thermometer S V22 3**

- \* The most accurate core body thermometer
- \* Implanted in animals to measure temperature
- \* Capsule size: D8.9xL22.8mm



**Rectal Thermometer SV224**

- \* Temperature catheter inserted in the rectum
- \* Carry it on the tail or neck
- \* Temperature catheter size D1.3xL50mm



**Laboratory Animal Thermometer SV227**

- \*Weight 1.2g, easy to carry on the mouse's body
  - \*Ultra-thin probe can be inserted inside body
  - \*Battery life up to one years
- 30 meters



**Rectal thermometer for mice SV228**

- \*1.3mm diameter stainless steel probe is durable
- \* Easy to measure the anus temperature of mouse
- \*Rechargeable and reusable and transmitting distance

#### 4、 Measurement method

##### 4. 1、 Measuring the core temperature inside body

The capsule thermometer SV223 was implanted into mice and rats to measure body temperature using anesthesia surgery. The operating instructions are attached.



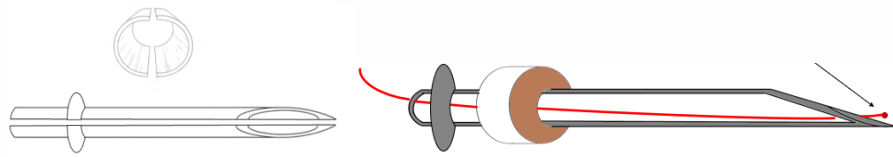
##### 4. 2. Measuring rectal temperature

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.

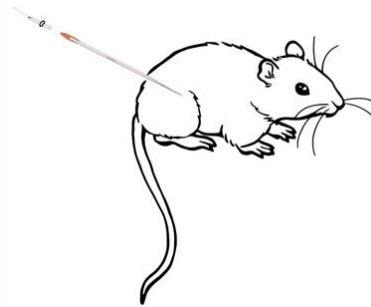


### 4.3. Measuring abdominal temperature

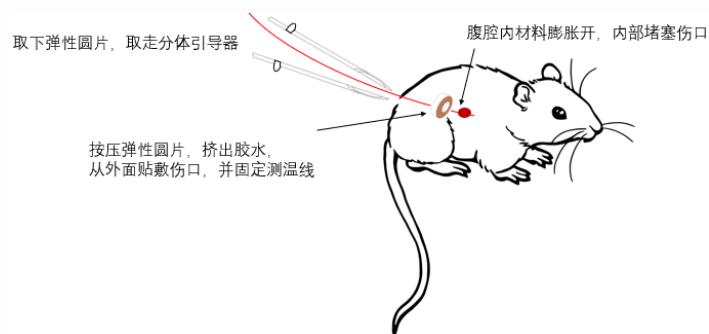
first step Preparing the bootloader



Step 2 The guide is implanted into the abdominal cavity

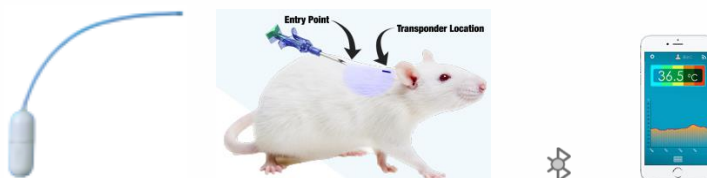


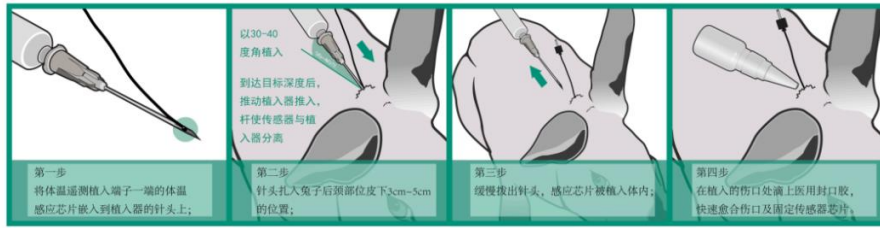
Step 3 Exit the bootloader



### 4.4. Measure the subcutaneous temperature of the neck

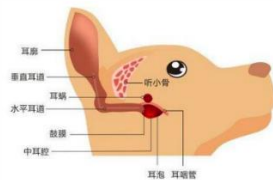
Use the rectal thermometer SV224 and implant the temperature probe subcutaneously into the back of the neck of mice and rats with a medical needle. Drop medical glue on the wound to solidify. Finally, use masking tape or 502 glue to fix the thermometer outside the animal's body. See the figure below for details.





#### 4.5. Measuring 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.



#### 5. 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>
- ③ Scan the QR code with your phone and download our App TempView from Google Play.



##### —App operation flow chart

#### 6. About FMG

Please visit our website [www.fmg-tech.com](http://www.fmg-tech.com) to learn more about our products. If you have any questions, please contact our customer service: Vincent: [sales@fmg-tech.com](mailto:sales@fmg-tech.com).

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