

**CSI286Ca01****Primary Canine Epididymal Smooth Muscle Cells (EpSMC)****Organism Species: Canis familiaris; Canine (Dog)*****Instruction manual***

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Revised in May, 2025)

## [ DESCRIPTION ]

**Cell Type:** Smooth muscle cell**Synonyms:** EpSMC**Strain:** Beagle**Age:** 3-4 Months**Tissue Source:** Epididymis**Gender:** Male**Disease:** Normal**Size:**  $>5 \times 10^5$  cell/vial

## [ PROPERTIES ]

**Cell activity:**  $>85\%$  (Viability by Trypan Blue Exclusion).**Formulation:** Frozen 1 mL or T25 flask.**Biosafety:** Negative for HIV-1, HBV, HCV, mycoplasma, bacteria, yeast and fungi.**Applications:** For research use only. It is not approved for human or animal use, or for application in clinical diagnostic procedures.**Growth Properties:** Adherent

## [ CONTENTS ]

**Form & Buffer:** Supplied as solution form in frozen stock solution, containing 90% FBS+10% DMSO.

## [ USAGE ]

Upon receiving the cells in a T-25 flask at room temperature, immediately transfer the cells to 37°C, 5% CO<sub>2</sub> incubator; the cells in vials, directly and immediately transfer the cells from dry ice to liquid nitrogen.

**Culture conditions:**

DMEM+5%FBS+1%Smooth muscle cell Growth Supplement+1%Penicillin-Streptomycin Solution

Temperature: 37°C

Condition: 95% air, 5% carbon dioxide

**Cell recovery:**

After receiving the cells, shake at 37°C in a water bath until completely dissolved, transfer to a 15 ml centrifuge tube, add 3-5 times complete culture solution, 1000 rpm for 5 min, discard the supernatant, and place in a T25 flask for culture.



## Cell passage:

1. Cell passage when cell growth at 85-95%.
2. Discard the medium and wash with PBS 1-2 times.
3. Add 1 ml of Trypsin at 37°C, observe the cell under the microscope. If the cells are retracted and rounded, pat the culture flask to let the cells fall off. Stop digestion by adding 2 ml of complete medium containing 10% serum. Make it a single cell suspension.
4. Add the fresh medium to resuspend the cells. Unless otherwise stated, the recommended ratio of primary cells is 1/3.

## [ STORAGE ]

Freeze of the liquid nitrogen (90% FBS +10% DMSO).

## [ Shipping ]

Dry ice.

## [ IMPORTANTNOTE ]

The cell is for research use only, and we will not be responsible for any issue if the cell was used in clinical diagnostic or any other procedures.

## [ Figure ]

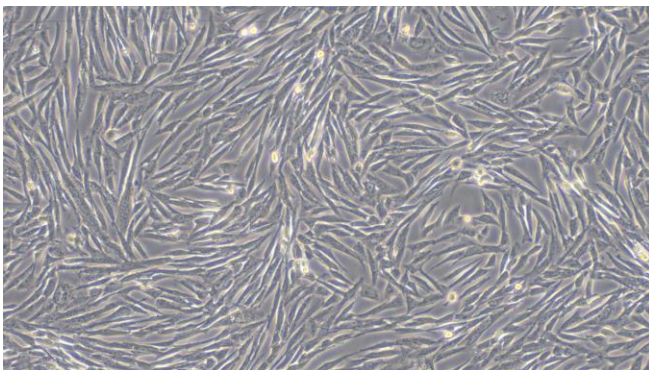


Figure 1

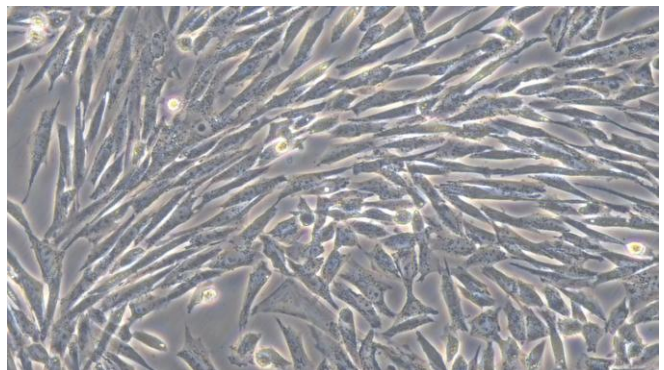


Figure 2

Figure 1 Morphology of Canine Epididymal Smooth Muscle Cells (Optical microscope, ×100)

Figure 2 Morphology of Canine Epididymal Smooth Muscle Cells (Optical microscope, ×200)

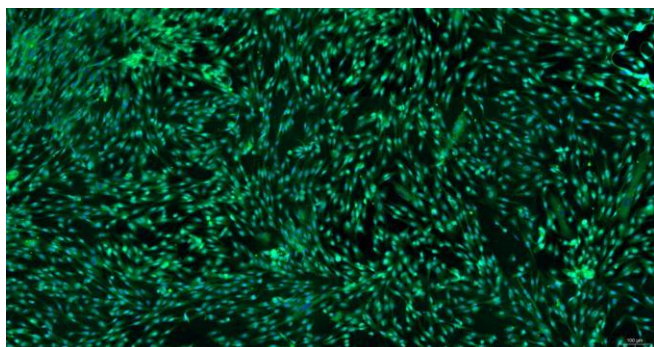


Figure 3

Figure 3 Immunofluorescence identification of  $\alpha$ -SMA specific antibody ( $\times 100$ )

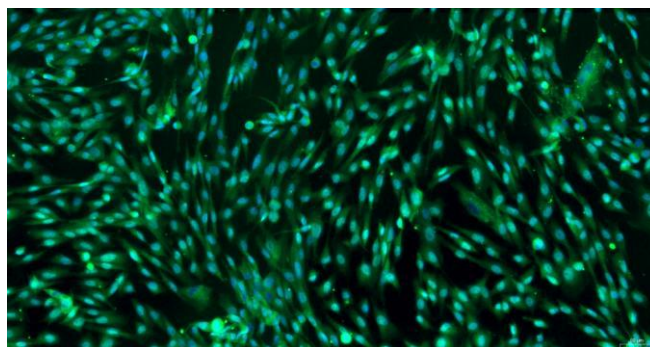


Figure 4

Figure 4 Immunofluorescence identification of  $\alpha$ -SMA specific antibody ( $\times 200$ )

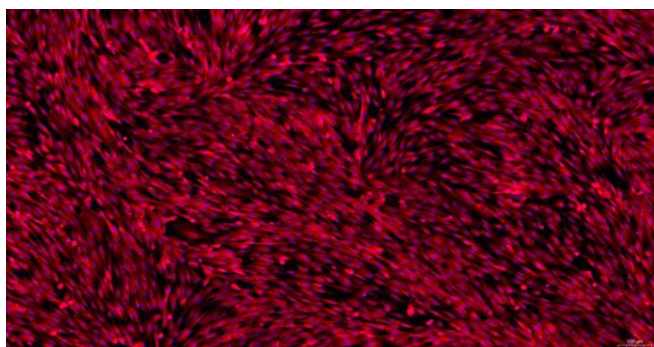


Figure 5

Figure 5 Immunofluorescence identification of Actin Alpha 2, Smooth Muscle (ACTa2) specific antibody ( $\times 100$ )

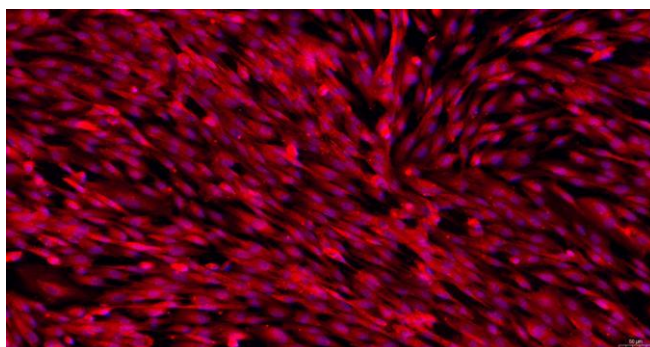


Figure 6

Figure 6 Immunofluorescence identification of Actin Alpha 2, Smooth Muscle (ACTa2) specific antibody ( $\times 200$ )