CSI096Ca01

Primary Canine Mammary Epithelial Cells (MEC)

Organism Species: Canis familiaris; Canine (Dog)

Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Revised in Jun, 2026)

[DESCRIPTION]

Cell Type: Epithelium
Synonyms: MEC
Strain: Beagle
Age: 24 months
Tissue Source: Mammary gland
Gender: Female
Disease: Normal
Size: >5×10^5 cells/vial
Growth Properties: Adherent
Morphology: Epithelial-like

[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.

[CONTENTS]

Form & Buffer: Supplied as solution form in frozen stock solution (Protein-free, Chemical Defined Cell Cryopreservation Medium). ***MEC are cryopreserved at P0 and delivered frozen.***

[USAGE]

Upon receiving the cells in a T-25 flask at room temperature, immediately transfer the cells to 37°C, 5% incubator; the cells in vials, directly and immediately transfer the cells from dry ice to liquid nitrogen.
Culture conditions:
Coating conditions: Rat tail collagen I (2-5 ug/cm^2)
DMEM/F12+10 % FBS+1% Epithelial Cell Growth Supplement+1% Penicillin-Streptomycin Solution
Temperature: 37°C
Condition: 95% air, 5% carbon dioxide
Medium Renewal: Every 2 to 3 days

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Dissociation Solution: 0.25% Trypsin

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 1/2.

[Shipping]

Dry ice.

[STORAGE]

Upon receiving, directly and immediately transfer the cells from dry ice to liquid nitrogen and keep the cells in liquid nitrogen until they are needed for experiments.

[IMPORTANTNOTE]

1. The culture cycle of Primary Canine Mammary Epithelial Cells is limited in *vitro*. It is recommended to use the specialized growth medium provided by Cloud-Clone Corp. and follow the correct operational procedures to ensure optimal culture conditions for these cells.

2. It is recommended that culture bottles be coated with Collagen type I from rat tail, and the concentration of rat tail collagen coating is 2-5μg/cm^2.

3. 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]

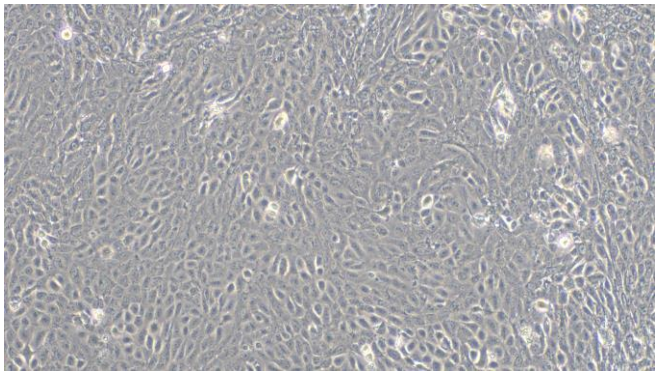


Figure 1

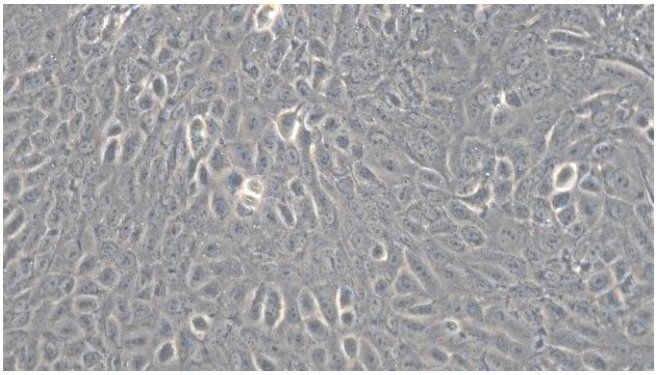


Figure 2

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Figure 1 Morphology of Canine Mammary Epithelial Cells (Optical microscope,×100)

Figure 2 Morphology of Canine Mammary Epithelial Cells (Optical microscope,×200)

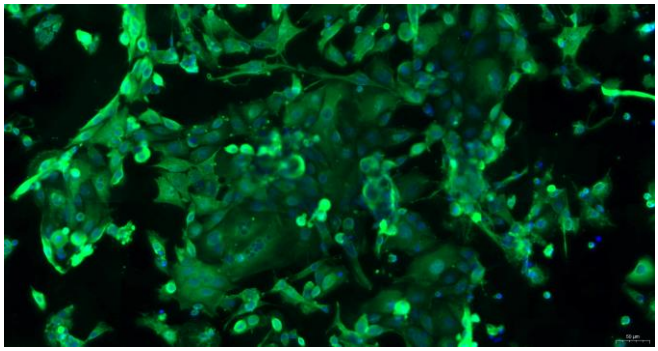


Figure 3

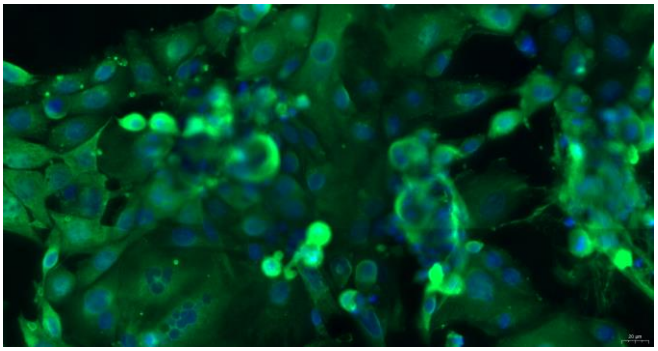


Figure 4

Figure 3 Immunofluorescence identification of Cytokeratin 18 (CK18) specific antibody (×200)

Figure 4 Immunofluorescence identification of Cytokeratin 18 (CK18) specific antibody (×400)

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