CSI012Ca01

Primary Canine Brain Microvascular Endothelial Cells (BMEC)

Organism Species: Canis familiaris; Canine (Dog)

Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Revised in Jan, 2026)

[DESCRIPTION]

Cell Type: Epithelium
Synonyms: BMEC
Strain: Beagle
Age: 1-2 Months
Tissue Source: Brain tissue
Disease: Normal
Size: >5×10^5cell/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 (Protein-free, Chemical Defined Cell Cryopreservation Medium).

[USAGE]

Upon receiving the cells in a T-25 flask at room temperature, immediately transfer the cells to 37°C, 5% CO_2 incubator; the cells in vials, directly and immediately transfer the cells from dry ice to liquid nitrogen.
Culture conditions:
Endothelial Cell Medium:
DMEM/F12+10%FBS+1%Endothelial 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,

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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℃, 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.

[IMPORTANT NOTE]

1. The cultured cycle of Primary Canine Brain Microvascular Endothelial Cell is limited in *vitro*. It is suggested that after cell resuscitation, the special growth medium and correct operation method recommended by us should be used for culture, and it should be used for follow-up experiments as soon as possible.

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]

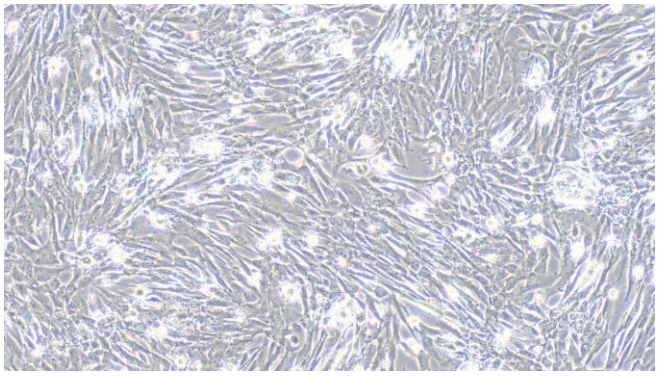

Figure 1

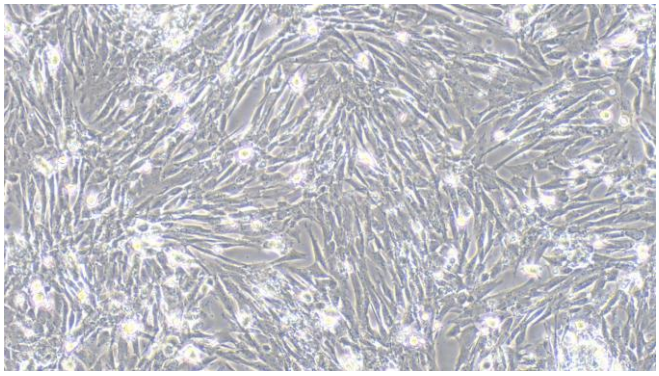

Figure 2

Figure 1 Morphology of Canine Brain Microvascular Endothelial Cells (Optical microscope,×100)

Figure 2 Morphology of Canine Brain Microvascular Endothelial Cells (Optical microscope,×100)

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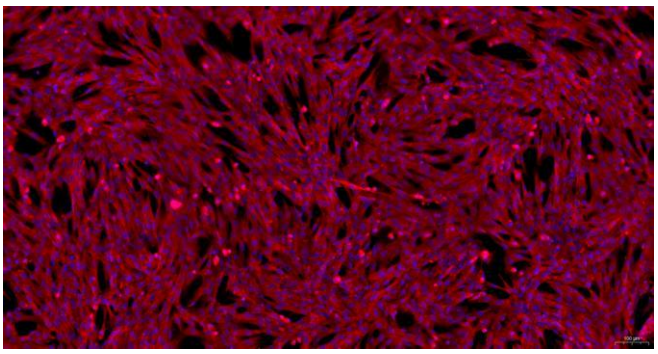

Figure 3

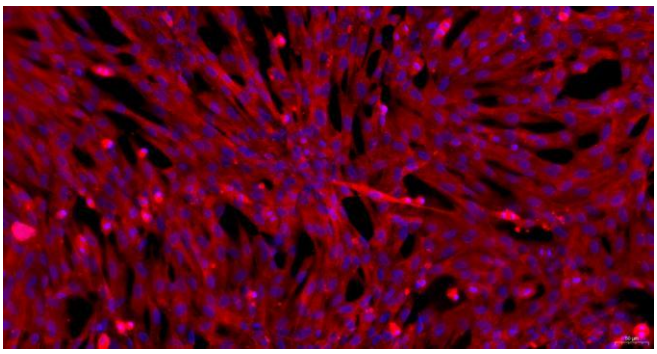

Figure 4

Figure 3 Immunofluorescence identification of vWF (Von Willebrand Factor) specific antibody (×200)

Figure 4 Immunofluorescence identification of vWF (Von Willebrand Factor) specific antibody (×400)

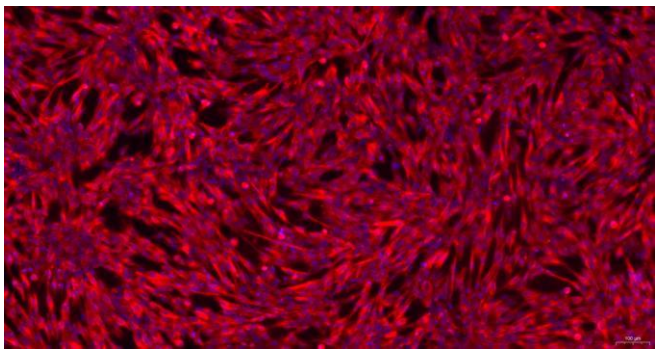

Figure 5

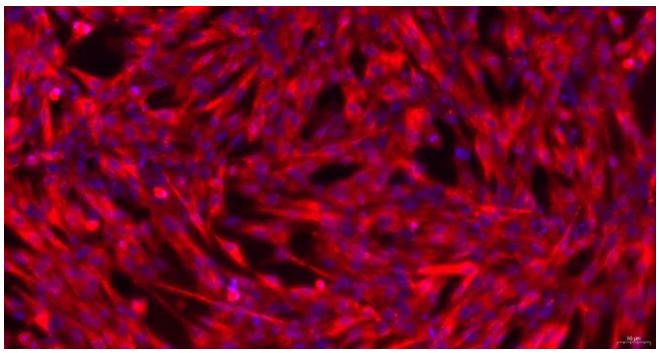

Figure 6

Figure 5 Immunofluorescence identification of FVIII (Coagulation Factor VIII) specific antibody (×200)

Figure 6 Immunofluorescence identification of FVIII (Coagulation Factor VIII) specific antibody (×400)

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