CSI913Ra01

Primary Rat Dermal Vascular Smooth Muscle Cells (DVSMC)

Organism Species: Rattus norvegicus (Rat)

Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Revised in Mar, 2026)

[DESCRIPTION]

Cell Type: Smooth muscle cell
Synonyms: DVSMC
Strain: Sprague Dawley Rat
Age: 8-9weeks
Tissue Source: Dermis
Disease: Normal
Size: >5×10^5cell/vial
Growth properties: Adherent
Morphology: Spindle-shaped

[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, containing 90% FBS+10% DMSO.
DVSMC are cryopreserved at P1 and delivered frozen.

[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:
DMEM +10% FBS+1% Smooth Muscle Cell Growth Supplement+1% Penicillin-Streptomycin Solution
Temperature: 37°C
Condition: 95% air, 5% carbon dioxide
Medium Renewal: Every 2 to 3 days
Dissociation Solution: 0.25% Trypsin

23603 W. Fernhurst Dr., Unit 2201, Katy, TX 77494, USA | 001-832-538-0970 | www.cloud-clone.us | mail@cloud-clone.us

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 Solutionat 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 5% 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 culture cycle of Primary Rat Dermal Vascular Smooth Muscle Cells (DVSMC) is limited in vi*tro*. 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. The cell is for research use only, we will not be responsible for any issue if the cell was used in clinical diagnostic or any other procedures.

[Figure]

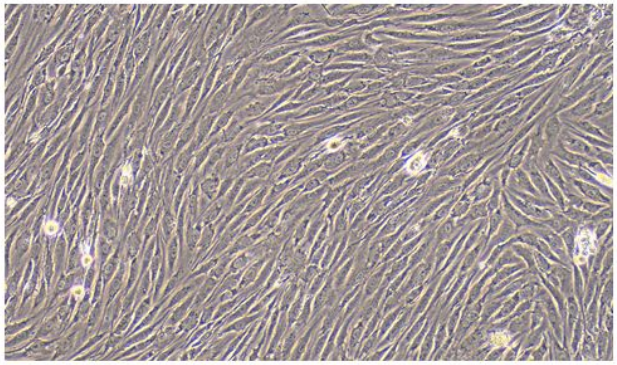

Figure 1

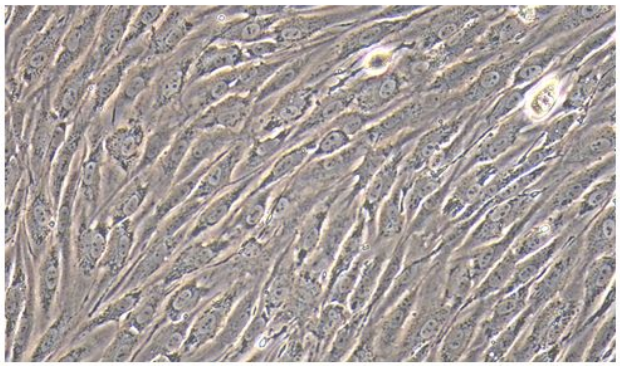

Figure 2

Figure 1 Morphology of Rat Dermal Vascular Smooth Muscle Cells (Optical microscope,×100)

23603 W. Fernhurst Dr., Unit 2201, Katy, TX 77494, USA | 001-832-538-0970 | www.cloud-clone.us | mail@cloud-clone.us

Figure 2 Morphology of Rat Dermal Vascular Smooth Muscle Cells (Optical microscope,×200)

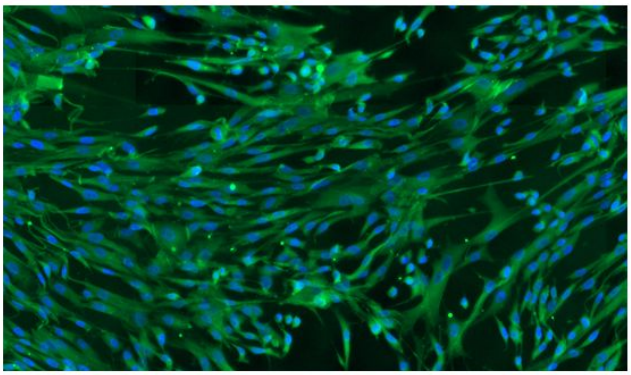

Figure 3

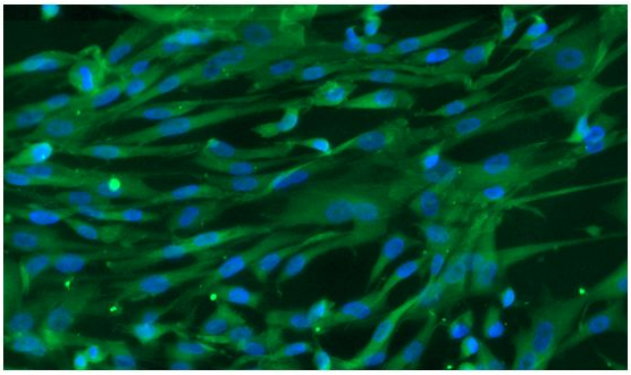

Figure 4

Figure 3 Immunofluorescence identification of Actin Alpha 2 (ACTa2) specific antibody (×200)

Figure 4 Immunofluorescence identification of Actin Alpha 2 (ACTa2) specific antibody (×400)

23603 W. Fernhurst Dr., Unit 2201, Katy, TX 77494, USA | 001-832-538-0970 | www.cloud-clone.us | mail@cloud-clone.us