



**H9C2**

**CSI007Ra11**

**Instruction manual**

FOR RESEARCH USE ONLY  
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Revised in Apr, 2023)

## [ DESCRIPTION ]

H9C2 is a subclone of the original clonal cell line derived from embryonic BD1X rat heart tissue that exhibits many of the properties of skeletal muscle. This cell line can be used in cardiovascular disease research.

**Synonyms:** H9c2; H9C2; H9c2(2-1)

**Organism:** Rattus norvegicus, rat

**Tissue Source:** Heart; Myocardium

**Age:** embryo

**Morphology:** Myoblast

**Growth Properties:** Adherent

## [ PROPERTIES ]

**Cell activity:** >95% (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.

**Size:** >5×10<sup>5</sup>cell/vial

## [ STORAGE ]

Upon receiving, check all containers for leakage or breakage. 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.

**Form & Buffer:** Supplied as solution form in frozen stock solution, containing 50% base medium +40%FBS+10%DMSO.

**Storage conditions:** liquid nitrogen

## [ USAGE ]

**Culture conditions:**

Complete growth medium: DMEM+10%FBS+1%Penicillin-Streptomycin Solution

Temperature: 37°C

Condition: 95% air, 5% carbon dioxide



## **Cell recovery:**

1. Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the cap out of the water. The thawing time is about 2 minutes.
2. Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by spraying with 75% ethanol. All of the operations from this point on should be carried out under strict aseptic conditions.
3. Transfer the vial contents to a centrifuge tube containing 9.0mL complete culture medium. and spin at approximately 1000 rpm for 5 minutes.
4. Resuspend cell pellet with the recommended complete medium . and dispense into a T25 culture flask.
5. Incubate the culture at 37°C, 5% CO<sub>2</sub> in a suitable incubator.

## **Cell passage:**

1. Cell passage when cell growth at 85-95%.
2. Remove and discard culture medium and wash with PBS 1-2 times.
3. Add 1.0 mL of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 2 to 3 minutes. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal). Stop digestion by adding 2-3 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 1/3-1/4.

## **[ Shipping ]**

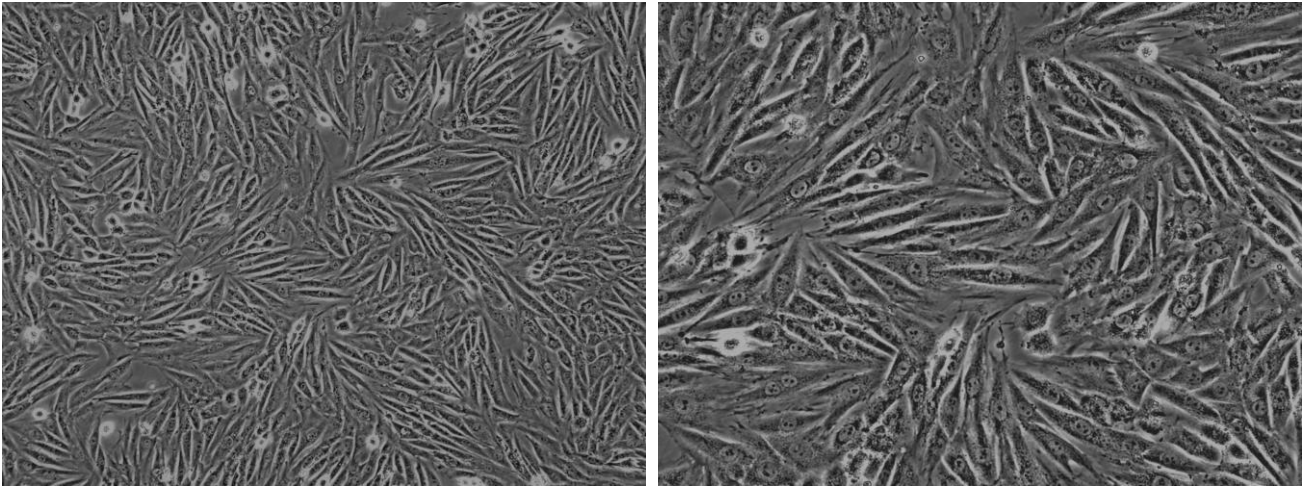
Dry ice.

## **[ IMPORTANTNOTE ]**

1. This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use.
2. To insure the highest level of viability, thaw the vial and initiate the culture as soon as possible upon receipt. If upon arrival, continued storage of the frozen culture is necessary, it should be stored in liquid nitrogen vapor phase and not at -70°C. Storage at -70°C will result in loss of viability.
3. After cell recovery, please take regular microscopic examination and photos to record the growth status of cells.
4. Read the instructions carefully, and keep and operate in strict accordance with the instructions. If you observe abnormalities or have questions about cell culture operations, please contact us in time.



**[ Figure ]**



Morphology of H9C2 (Optical microscope, 100x, 200x)