



CSI178Ra01

Primary Rat Retinal Ganglion Cells (RGC)

Organism Species: *Rattus norvegicus* (Rat)

*Instruction manual*

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

2nd Edition (Revised in Jan 2025)

## [ DESCRIPTION ][ DESCRIPTION ]

**Cell Type:** Ganglion cell

**Synonyms:** RGC

**Strain:** Sprague Dawley Rat

**Age:** 1-3 days

**Tissue Source:** Retina

**Size:**  $>5 \times 10^5$  cell/vial

## [ PROPERTIES ]

**Cell activity:**  $>85\%$  (Viability by Trypan Blue Exclusion).

**Formulation:** Frozen 1 mL (90%FBS+10% DMSO)

**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:**

RGCs medium: Neurobasal-A medium+B-27 Supplement (50X)+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. Further culture of Rat RGCs are guaranteed under the conditions we provide; however, Rat RGCs



are not recommended for expansion or long-term cultures because cells do not proliferate in culture.

2. Experiments should be well organized before thawing RGC . It is recommended that RGC are used for experiments as quickly as possible after thawing the cells.

**[ 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. Primary Rat Retinal Ganglion Cells (RGC) are not recommended for expanding or long-term cultures since the cells do not proliferate in culture.
- 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 0.1mg/ml.
- 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 ]**

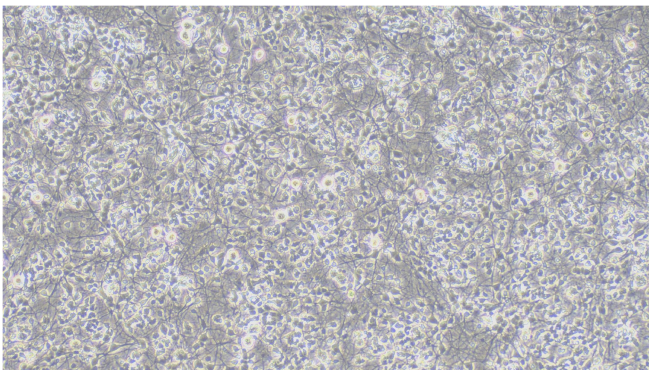


Figure 1

Figure 1 Morphology of Rat Retinal Ganglion Cells (Optical microscope,×100)

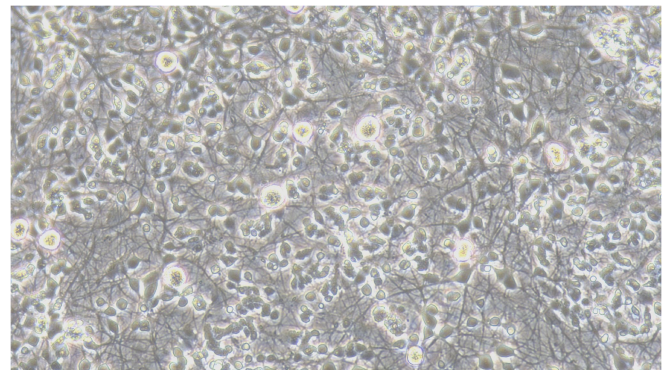


Figure 2

Figure 2 Morphology of Rat Retinal Ganglion Cells (Optical microscope,×100)

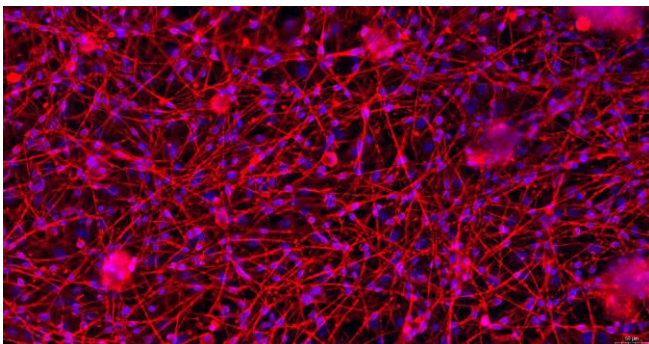


Figure 3

Figure 3 Immunofluorescence identification of Tubulin Beta specific antibody (×200)

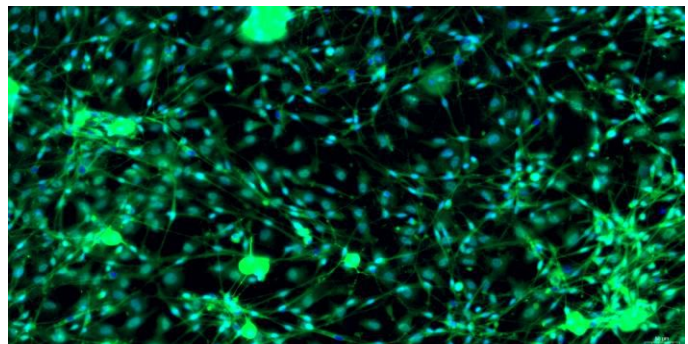


Figure 4

Figure 4 Immunofluorescence identification of MAP2 specific antibody (×200)