



CSI260Ra01

Primary Rat Peripheral Blood Neutrophils (PBNs)

Organism Species: *Rattus norvegicus* (Rat)

Instruction manual

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

2th Edition (Revised in Dec, 2023)

[DESCRIPTION]

Neutrophil, derived from bone marrow stem cells, is a polymorphonuclear granulocyte (PMN). Neutrophil is a terminal cell with the shortest life span in vivo. Generally, neutrophil activity is stable within 12-24h in vitro culture, its activity decreases within 48h, and it basically dies after 96h.

Cell Type: Polymorphonuclear granulocyte

Synonyms: PBNs

Species: *Rattus norvegicus* (Rat)

Tissue Source: Peripheral blood

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

[PROPERTIES]

Cell activity: $>90\%$ (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: Suspension

[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% incubator; the cells in vials, directly and immediately transfer the cells from dry ice to liquid nitrogen.

Culture conditions:

RPMI-1640+10% FBS+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 culture:

The culture cycle of Rat Peripheral Blood Neutrophils (PBNs) were limited in vitro. Further cultivation of PBNs is guaranteed under the conditions provided by us. However, PBNs is not recommended for expansion or long-term culture because cells do not proliferate in culture.

[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. PBNs is not recommended for expanding or long-term cultures because of its lack of proliferative capacity.
2. Experiments should be well organized before thawing PBNs. It is recommended that PBNs are used for experiments as quickly as possible after thawing the cells. Cells are not intended for long-term culture.
3. 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]

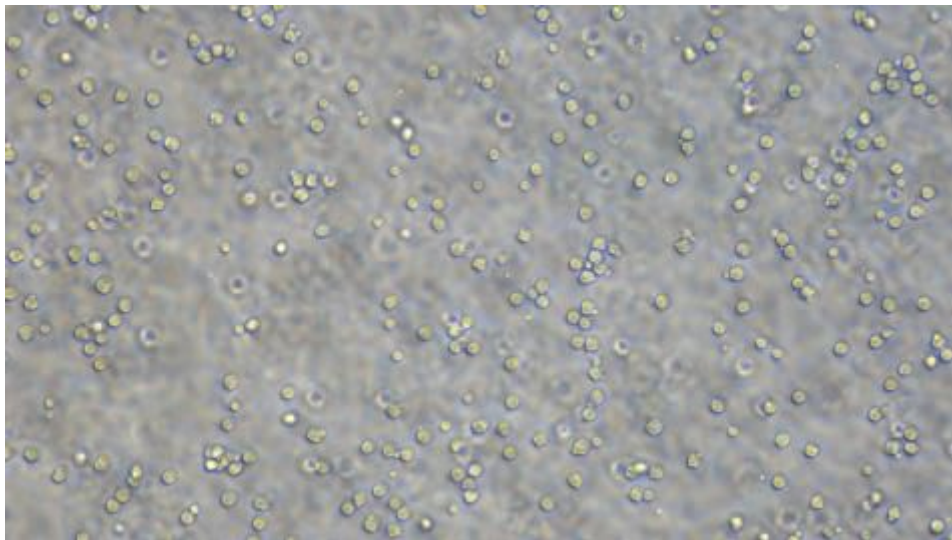


Figure 1

Morphology of Rat PBNs (Optical microscope, x200)