Optimization
Makes Differences

RPMI 1640

Basal Cell Culture Medium

—— For Biomanufacturing

RPMI 1640 is a basal cell culture medium that contains L-glutamine and can support the growth of adherent cells. RPMI 1640 does not contain proteins, lipids or any growth factors, so it might need to be used with serum.

Application

RPMI 1640 is intended for large scale manufacturing of therapeutic biomolecules, as well as for research purposes, but not for human or any therapeutic use.

Storage & Transportation

Store at 2~8℃, dark and dry
Ship at Room temperature (Liquid), Blue ice (Dry powder)

Shelf Life

RPMI 1640 Medium Liquid: 12 months
RPMI 1640 Dry Powder: 24 months

Quality Specifications

Specifications	RPMI 1640 Medium
Appearance	Red clear liquid
pH	7.0~7.5
Osmolality (mOsm/kg)	270~310
Solubility	——
Endotoxin (EU/mL)	＜1.0
Sterility test	Negative

Cell Culture Conditions

37℃，80% humidity，5~8%CO_2
Shaker speed 110–150 rpm (amplitude: 50mm).

Cell Recovery

1. Prewarm the RPMI 1640 medium at 37°C, 5% CO_2 for 30min.

2. Rapidly thaw frozen vial of frozen cells in a 37°C water bath.

3. Transfer the entire contents aseptically into a sterile centrifuge tube containing 5~10 mL prewarmed RPMI 1640 medium.

4. Centrifuge at 800 rpm for 5 minutes and discard the supernatant.

5. Resuspend the cell pellet with an appropriate amount of fresh medium, and transfer to a suitable culture vessel.

6. Add an appropriate amount of serum, shake the vessel gently to mix the cells, and incubate it in a humidified 37 °C incubator with 5% CO_2.

7. Passage the cells when adhere to the monolayer and reach 80% confluency.

Cell Culture Passaging

1. Prewarm the RPMI 1640 medium at 37°C, 5% CO_2 for 30min.

2. Aspirate medium from cell monolayer and rinse the culture vessel three times with prewarmed DPBS without Ca^{2+} or Mg^{2+}.

3. Add 0.25% Trypsin-EDTA to the culture vessel and incubate until cells have detached (~2–5 minutes at room temperature).

4. Tilt the culture vessel to make the cell supernatant flow out as soon as possible when the dissociation exceeds 90%. Stop the dissociation reaction by adding prewarmed RPMI 1640 medium.

5. Centrifuge at 800 rpm for 5 minutes and discard the supernatant.

6. Resuspend the cell pellet with an appropriate amount of fresh medium, and aliquot into new culture vessels.

7. Add an appropriate amount of fresh medium and serum, shake the vessels gently to mix the cells, and incubate them in a humidified 37 °C incubator with 5% CO_2.

Order Information

Cell Culture Media

Name	Cat No.	Type	Volume
RPMI 1640 Medium	C211218	Liquid	500ml /1000 ml
RPMI 1640 DPM	C211640	Dry powder	100L

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