

RPMI 1640 Cell Culture Medium + HEPES +  
Sodium Pyruvate  
Instruction Sheet  
LL-0066



### Safety and Use Statement

This product is for Research Use Only. This product is not approved for human or veterinary use or for use in *in vitro* diagnostics or clinical procedures.

### Medium Storage

RPMI 1640 Basal Medium should be stored at -20°C. Users should take care to protect basal medium from extended exposure to light. Fetal Bovine Serum and Gentamicin and Amphotericin B LifeFactors® should be stored at -20°C or lower. For long-term storage, LifeFactors should be stored at -70°C or lower. Thaw frozen components immediately prior to adding to the basal medium. Multiple freeze/thaw cycles are not recommended. Do not use product beyond expiration date.

### Medium Preparation

RPMI 1640 Basal Medium contains no growth factors or antimicrobials. To support cell viability and function you must add Fetal Bovine Serum to the basal medium as instructed in the chart below. Antimicrobials are not required to maintain cell viability. A vial of Gentamicin and Amphotericin B (GA; LS-1117) is provided with the purchase of LL-0066 RPMI 1640

Product	Part #	Volume	Final Concentrations in Supplemented Medium	Storage
<b>RPMI 1640 Medium Complete Kit, (RPMI 1640 Basal Medium, Fetal Bovine Serum, Gentamicin and Amphotericin B)</b>	<a href="#">LL-0066</a>			2-8°C, when prepared
<b>RPMI 1640 Basal Medium</b>	<a href="#">LM-0025</a>	100 mL		-20°C
FBS LifeFactor	<a href="#">LS-1012</a>	10 mL	10%	-20°C
Antimicrobial Supplement: Gentamicin and Amphotericin B	<a href="#">LS-1117</a>	1 mL	Gentamicin 30 µg/mL Amphotericin B 15 ng/mL	-20°C

Part #	Products
<a href="#">HC-0024</a>	Human Peripheral Blood Mononuclear Cells - 50 x 10 <sup>6</sup> cells per vial
<a href="#">HC-0025</a>	Human Peripheral Blood Mononuclear Cells - 25 x 10 <sup>6</sup> cells per vial
<a href="#">HC-0026</a>	Human CD3+ Pan T Cells - 5 x 10 <sup>6</sup> cells per vial
<a href="#">HC-0027</a>	Human CD3+ Pan T Cells - 10 x 10 <sup>6</sup> cells per vial

### Cells Supported by RPMI 1640 Complete Medium Kit:

To place an order, please visit [lifelinecelltech.com](http://lifelinecelltech.com) or call us at **877.845.7787**

Lifeline Cell Technology - 8415 Progress Drive, Suite T - Frederick, MD 21701

## Basic Aseptic Technique

Cells, medium and LifeFactors should only be used in an aseptic environment, a Class II biological safety cabinet with front access and filtered laminar airflow, or an equivalent device. Always wear gloves and eye protection when working with these materials. Wipe or spray all bottles and vials with 70% ethanol or isopropanol, especially around the area of the cap, before placing them in the biological safety cabinet. Allow these surfaces to dry completely before opening the bottle or vials. Transfer medium or LifeFactors with disposable sterile pipettes. Do not mouth pipette! Take up the volume needed into the pipette, being careful not to touch the sterile tip to the rim of the container or any other surface. Close the container and open the container into which the transfer is being made, again being careful not to touch any surfaces with the sterile tip. Transfer the material and close the container. Wash your hands before and after working with cell cultures. Do not block airflow in a laminar flow hood as this may compromise sterility. Ensure that biological safety cabinets are certified routinely and that the HEPA filters are replaced regularly.

## Supplementation

All procedures should be executed using aseptic technique (see section on basic aseptic technique). Fetal Bovine Serum LifeFactor (FBS; LS-1012) is sufficient to supplement one 100 mL bottle of RPMI 1640 Basal Medium. RPMI 1640 Basal medium and FBS LifeFactor should be thawed and mixed immediately prior to supplementation. Antimicrobials are not required but may be added at this step by adding 0.1 mL of Gentamicin and Amphotericin (LS-1104). Mix supplemented medium by gently pipetting up and down with a large volume pipette (25 or 50 mL) or gently invert the tightly closed 100 mL bottle. Do not shake or froth the medium. The supplemented medium may be stored at 2 to 8°C for up to two weeks.

## Pre-warming Medium

If using less than 100 mL of supplemented (complete) medium, Lifeline® recommends warming only the volume needed in a sterile conical tube. Repeated warming of the entire bottle over extended periods may cause degradation and reduced shelf life of the medium. When warming the entire bottle of medium, Lifeline recommends using a water bath sleeve to help protect the medium from contaminants in a 37°C water bath. Medium will warm to 37°C in 10 to 30 minutes, depending on the volume. Do not leave medium in water bath for extended periods of time.

## Optional Supplements

Gentamicin and Amphotericin B (GA):

GA is used to minimize bacterial and fungal contamination. These antimicrobials react with cells and may inhibit optimal performance. If proper aseptic technique is used, antimicrobials should not be necessary.

If you wish to add GA to Lifeline medium, a 1 mL (LS-1117) LifeFactor of GA is provided with the purchase of LL-0066 RPMI 1640 Complete Kit. GA is best stored at -20°C; it should only be thawed once and stored at 4°C for a maximum of two weeks after thaw. Addition of 0.1 mL of GA to 100 mL of media will provide an effective concentration to inhibit bacterial and fungal cell division.

## The Lifeline Guarantee

Lifeline's rigorous quality control ensures sterility and performance to standardized testing criteria. If Lifeline's products do not meet our posted performance and quality standards, we will replace them at no charge or provide a full refund. Upon request, we will provide lot-specific QC test results, material safety data sheets and certificates of analysis. See complete guarantee/warranty statement at [lifelinecelltech.com](http://lifelinecelltech.com) or contact your technical representative for more information.

Call Lifeline Technical Service and Sales at **877.845.7787**

or visit [lifelinecelltech.com](http://lifelinecelltech.com) for more information

Lifeline Cell Technology - 8415 Progress Drive, Suite T - Frederick, MD 21701

©2020 Lifeline Cell Technology. All Rights Reserved