**Raji**

**CCL-86™**

**Description**

The Raji line of lymphoblast-like cells was established by R.J.V. Pulvertaft in 1963 from a Burkitt's lymphoma of the left maxilla of an 11-year-old Black male. This cell line can be used in immunology research.

**Organism:** *Homo sapiens*, human  
**Cell Type:** B lymphocyte  
**Age:** 11 years  
**Gender:** Male  
**Morphology:** lymphoblast  
**Growth properties:** Suspension  
**Disease:** Burkitts lymphoma

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**Storage Conditions**

**Product format:** Frozen  
**Storage conditions:** Vapor phase of liquid nitrogen

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**Intended Use**

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.

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**BSL 2**

ATCC determines the biosafety level of a material based on our risk assessment as guided by the current edition of *Biosafety in Microbiological and Biomedical Laboratories* (*BMBL*), U.S. Department of Health and Human Services. It is your responsibility to
understand the hazards associated with the material per your organization’s policies and procedures as well as any other applicable regulations as enforced by your local or national agencies.

Cells contain Epstein-Barr virus (EBV) DNA sequences

ATCC highly recommends that appropriate personal protective equipment is always used when handling vials. For cultures that require storage in liquid nitrogen, it is important to note that some vials may leak when submersed in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vial exploding or blowing off its cap with dangerous force creating flying debris. Unless necessary, ATCC recommends that these cultures be stored in the vapor phase of liquid nitrogen rather than submersed in liquid nitrogen.

Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at www.atcc.org.

Growth Conditions

Temperature: 37°C
Atmosphere: 95% Air, 5% CO₂

Handling Procedures

Unpacking and storage instructions:
  1. Check all containers for leakage or breakage.
2. Remove the frozen cells from the dry ice packaging and immediately place the
cells at a temperature below -130°C, preferably in liquid nitrogen vapor, until
ready for use.

**Complete medium:** The base medium for this cell line is ATCC-formulated RPMI-1640
Medium (ATCC 30-2001). To make the complete growth medium, add the following
components to the base medium: fetal bovine serum (ATCC 30-2020) to a final
concentration of 10%.

**Handling Procedure:**

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.

1. Thaw the vial by gentle agitation in a 37°C water bath. To reduce the
possibility of contamination, keep the O-ring and cap out of the water.
Thawing should be rapid (approximately 2 minutes).
2. Remove the vial from the water bath as soon as the contents are thawed, and
decontaminate by dipping in or spraying with 70% 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 9.0 mL complete
culture medium and spin at approximately 125 x g for 5 to 10 minutes.
4. Resuspend the cell pellet with the recommended complete medium (see the
specific batch information for the culture recommended dilution ratio) and
dispense into a 25 cm² or a 75 cm² culture flask. It is important to avoid
excessive alkalinity of the medium during recovery of the cells. It is suggested
that, prior to the addition of the vial contents, the culture vessel containing
the complete growth medium be placed into the incubator for at least 15
minutes to allow the medium to reach its normal pH (7.0 to 7.6).
5. Incubate the culture at 37°C in a suitable incubator. A 5% CO₂ in air
atmosphere is recommended if using the medium described on this product.

**Subculturing procedure:**

Cultures can be maintained by addition of fresh medium or replacement of medium.
Alternatively the cells may be collected by centrifugation. Cultures can then be
established by resuspending the cells in fresh medium at 4 x 10⁵ viable cells/mL. A
maximum of 3 x 10⁶ viable cells/mL is obtainable. Corning T-75 flasks (catalog
#431464) are recommended for subculturing this product.
Medium Renewal: Every 2 to 3 days

Reagents for cryopreservation: Complete growth medium supplemented with 10% (v/v) DMSO (ATCC 4-X)

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: Raji (ATCC CCL-86)

References

References and other information relating to this material are available at www.atcc.org.

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