



# NALM-1

CRL-1567™

## Description

NALM-1 is a lymphoblast cell line that was isolated from the peripheral blood of a three-year-old, female patient with leukemia. This cell line was deposited by J Minowada and can be used in immunology and immune system disorder research.

**Organism:** *Homo sapiens*, human

**Cell Type:** lymphoblast

**Tissue:** Peripheral blood

**Age:** 3 years

**Gender:** Female

**Morphology:** lymphoblast

**Growth properties:** Suspension

**Disease:** Leukemia

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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 1

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*

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(*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.

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.

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### Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at [www.atcc.org](http://www.atcc.org).

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### Growth Conditions

**Temperature:** 37°C

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### 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

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cells at a temperature below  $-130^{\circ}\text{C}$ , preferably in liquid nitrogen vapor, until ready for use.

**Complete medium:** The base medium for this cell line is ATCC-formulated RPMI-1640 Medium, Catalog No. 30-2001. To make the complete growth medium, add the following components to the base medium: fetal bovine serum to a final concentration of 15%.

**Subculturing procedure: Protocol:** Cultures can be maintained by addition of fresh medium. Use Start-up seeding density between  $4.5 \times 10^5$  to  $6.0 \times 10^5$  viable cells/mL. Maintain cultures at a cell concentration between  $1 \times 10^5$  and  $1 \times 10^6$  cells/ml. Do not allow the cell concentration to exceed  $1 \times 10^6$  cells/ml.

**Reagents for cryopreservation:** Complete growth medium supplemented with 5% (v/v) DMSO (ATCC 4-X)

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### Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: NALM-1 (ATCC CRL-1567)

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### References

References and other information relating to this material are available at [www.atcc.org](http://www.atcc.org).

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