

CRL-1588[™]

Description

Organism: Mus musculus, mouse

Cell Type: T lymphoblast

Morphology: lymphoblast

Growth properties: Suspension

Disease: Lymphoma

Storage Conditions

Product format: Frozen

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.

BSL₁

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.

ATCC highly recommends that appropriate personal protective equipment is always



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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.

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: Dulbecco's modified Eagle's medium with 4.5 g/L glucose, 90%; horse serum, 10%

Handling Procedure:

HANDLING PROCEDURE FOR FROZEN CELLS

- Initiate culture as soon as possible upon receipt.
- Thaw by rapid agitation in 37°C water bath. Thawing should be rapid (within

40-60 seconds). As soon as the ice is melted, remove the ampule from the water

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bath and immerse in 70% ethanol at room temperature. All of the operations from this point on should be carried out under strict aseptic conditions.

- Transfer the cell suspension and dilute it with the recommended culture medium in a culture flask (see specific batch information above for dilution ratio); incubate at 37°C with 5% CO_2 in air atmosphere. Since it is important to avoid excessive alkalinity of the medium during recovery of the cells, it is suggested that the culture medium be placed into the culture flask, tube, etc. and the pH be adjusted, as necessary, prior to the addition of the ampule contents. Note that the bicarbonate content of the culture medium will determine whether an atmosphere containing 5% or 10% CO_2 will be required.
- It is not necessary to remove the freezing additive (dimethylsulfoxide).
- If it is desired that the freezing additive be removed immediately, centrifuge the above diluted suspension at approximately 200 x g for 10 minutes, discard the fluid and resuspend the cells with growth medium at the dilution ratio given in the specific batch information above.

FLUID RENEWAL

Add fresh medium (depending on cell density) every 2-3 days.

SUBCULTURE PROCEDURE

Cultures can be maintained by the addition of fresh medium or replacement of medium. Alternatively cultures can be established by centrifugation with subsequent resuspension at $5 \times 10(4)$ viable cells/ml. A maximum of 1-2 x 10(6) viable cells/ml is obtainable.

HANDLING PROCEDURE FOR FLASK CULTURES (SUSPENSION)



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The flask was seeded with cells (see specific batch information above for concentration), grown and completely filled with medium to prevent loss of cells in transit. Upon receipt incubate the flask in an upright position for several hours to return the flask contents to 37°C. After the temperature has equilibrated, aseptically remove the entire contents of the flask and centrifuge at 200 x g for 10 minutes. Resuspend the cell pellet in 10 ml of the shipping medium. From this suspension remove a sample for a cell count and viability so that the cell density of the suspension can be adjusted to 2-3 x 10(5) viable cells/ml. If the suspension needs to be diluted use the shipping medium. Incubate the culture in a flat position at 37°C. The shipping medium contains reduced sodium bicarbonate suitable for a 5% CO₂ in air incubator. DMEM usually contains 3.7 grams of sodium bicarbonate per liter and should be incubated in a 10% CO₂ in air incubator. Maintain the cell density of the culture as suggested under the subculture procedure described above.

CATALOG DESCRIPTION

BW5147.G.1.4.OUAR.1 is a mutant subline of BW5147, an AKR/J mouse lymphoma maintained at the Jackson Laboratory. Mutant sublines resistant to 1 X 10(-4) M 6-thioguanine and to 1 X 10(-3) M ouabain were established by R. Hyman. The cell line can be used to produce T cell hybrids. Reference: J. Natl. Cancer Inst. (Bethesda) 52: 429-436, 1974. Submitted by: R. Hyman, Salk Institute, La Jolla, CA.

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Subculturing procedure:

Medium Renewal: Every 2 to 3 days

Cultures can be maintained by addition or replacement of fresh medium. Establish new cultures at 3 X 10 exp4 viable cells/ml. Subculture every 3 to 4 days.

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: BW5147.G.1.4.OUAR.1 (ATCC CRL-1588)

References

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

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