Description

Organism: Homo sapiens, human
Tissue: brain
Disease: Likely glioblastoma
Age: unknown
Gender: male
Morphology: epithelial
Growth Properties: adherent
Isoenzymes:
- AK-1, 1
- ES-D, 1
- G6PD, B
- GLO-I, 1
- Me-2, 1
- PGM1, 2
- PGM3, 1

DNA Profile:
- Amelogenin: X,Y
- CSF1PO: 10,11
- D13S317: 8,11
- D7S820: 8,9
- D5S818: 11,12
- D16S539: 12
- vWA: 15,17
- THO1: 9.3
- TPOX: 8

Cytogenetic Analysis: This is a hypodiploid human cell line with the modal chromosome number of 44 occurring in 48% of cells. The rate of higher ploidy was 5.9%. Twelve markers were common to all cells, including der(1)t(1;3)(p22;q21), der(16)t(1;16)(p22;p12), del(9)(p13) and nine others. The marker der(1) had two copies in most cells. There was only one copy of normal X. N1, N6 and N9 were not found.

Intended Use

This product is intended for research use only. It is not intended for any animal or human therapeutic or diagnostic use.

Complete Growth Medium

The base medium for this cell line is ATCC-formulated Eagle's Minimum Essential Medium, Catalog No. 30-2003. To make the complete growth medium, add the following components to the base medium: fetal bovine serum to a final concentration of 10%.

Citation of Strain

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: U-87 MG (ATCC® HTB-14™)
Incubate cultures at 37°C.

Briefly rinse the cell layer with Ca++/Mg++ free Dulbecco's phosphate-buffered saline (D-PBS) or

Add 2.0 to 3.0 mL of complete growth medium and aspirate cells by gently pipetting

If the cells are still attached,

Resuspend the cell pellet in fresh growth medium. Add appropriate aliquots of the cell suspension to

2 to 3 times per week

Remove and discard culture medium.

Medium Renewal: 2 to 3 times per week

Cryopreservation Medium

Complete culture medium described above supplemented with 5% (v/v) DMSO. Cell culture tested DMSO is

available as ATCC® Catalog No. 4-X.

Comments

Mycoplasma contamination was eliminated in September 1975. The ATCC® HTB-14™ cell line was deposited at ATCC in 1982. STR profiling, Y-chromosome paint, and Q-band assay confirmed that the cell line is male in origin. Based on current literature, the cell line is likely a glioblastoma of CNS origin (Allen, 2016).

References

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

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the current publication of the Biosafety in Microbiological and Biomedical Laboratories from the U.S. Department of Health and Human Services Centers for Disease Control and Prevention and National Institutes

Handling Procedure for Flask Cultures

The flask was seeded with cells (see specific batch information) grown and completely filled with medium at ATCC to prevent loss of cells during shipping.

1. Upon receipt visually examine the culture for macroscopic evidence of any microbial contamination. Using an inverted microscope (preferably equipped with phase-contrast optics), carefully check for any evidence of microbial contamination. Also check to determine if the majority of cells are still attached to the bottom of the flask; during shipping the cultures are sometimes handled roughly and many of the cells often detach and become suspended in the culture medium (but are still viable).

2. If the cells are still attached, aseptically remove all but 5 to 10 mL of the shipping medium. The shipping medium can be saved for reuse. Incubate the cells at 37°C in a 5% CO₂ in air atmosphere until they are ready to be subcultured.

3. If the cells are not attached, aseptically remove the entire contents of the flask and centrifuge at 125 x g for 5 to 10 minutes. Remove shipping medium and save. Resuspend the pelleted cells in 10 mL of this medium and add to 25 cm² flask. Incubate at 37°C in a 5% CO₂ in air atmosphere until cells are ready to be subcultured.

Subculturing Procedure

Volumes used in this protocol are for 75 cm² flasks; proportionally reduce or increase amount of dissociation

medium for culture vessels of other sizes. Corning® T-75 flasks (catalog #430641) are recommended for

subculturing this product.

1. Remove and discard culture medium.

2. Briefly rinse the cell layer with Ca++/Mg++ free Dulbecco's phosphate-buffered saline (D-PBS) or

0.25% (w/v) Trypsin - 0.53 mM EDTA solution to remove all traces of serum which contains trypsin inhibitor.

3. Add 2.0 to 3.0 mL of Trypsin-EDTA solution to flask and observe cells under an inverted microscope

until cell layer is dispersed (usually within 5 to 15 minutes). Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal.

4. Add 2.0 to 3.0 mL of complete growth medium and aspirate cells by gently pipetting

5. Resuspend the cell pellet in fresh growth medium. Add appropriate aliquots of the cell suspension to

new culture vessels.

6. Incubate cultures at 37°C.

Subcultivation Ratio: A subcultivation ratio of 1:2 to 1:5 is recommended

Medium Renewal: 2 to 3 times per week

Please read this FIRST

Storage Temp.
liquid nitrogen
vapor phase

Biosafety Level: 1

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should be cited in that manuscript in the following

manner: U-87 MG (ATCC® HTB-14™)

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Biosafety Level: 1

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Additional information on this culture is available on the ATCC web site at www.atcc.org.
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