**Organism:** Homo sapiens, human  
**Tissue:** lung; derived from metastatic site: pleural effusion  
**Disease:** carcinoma; small cell lung cancer  
**Age:** 60 years  
**Gender:** male  
**Morphology:** floating aggregates  
**Growth Properties:** floating aggregates  
**Isoenzymes:**  
- AK-1, 1  
- ES-D, 1  
- G6PD, A  
- GLO-I, 1-2  
- Me-2, 1  
- PGM1, 1  
- PGM3, 1  
**DNA Profile:**  
- Amelogenin: X  
- CSF1PO: 10  
- D13S317: 12  
- D16S539: 13  
- D5S818: 9  
- D7S820: 8,10  
- TH01: 6,9  
- TPOX: 8  
- vWA: 17  
**Cytogenetic Analysis:** There are 2 distinct aneuploid peaks, both have characteristic 3p deletion.

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**Description**

**Biosafety Level**

**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**

Iscove’s Modified Dulbecco’s Medium (ATCC® 30-2005), 80%; fetal bovine serum (ATCC® 30-2020), 20%

**Citation of Strain**

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: NCI-H128 [H128] (ATCC® HTB-120™)

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**SAFETY PRECAUTION**

ATCC highly recommends that protective gloves and clothing always be used and a full face mask always be worn when handling frozen vials. It is important to note that some vials 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 vessel exploding or blowing off its cap with dangerous force creating flying debris.

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**Unpacking & 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.

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**Handling Procedure for Frozen Cells**

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 7 minutes.  
4. Resuspend 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
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.

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.

Incubate the flask in an upright position for several hours at 37°C. After the temperature has equilibrated, aseptically remove the entire contents of the flask and centrifuge at 125 x g for 5 to 10 minutes. Remove shipping medium and save for reuse. Resuspend the cell pellet in 10 mL of this medium.

Incubate the culture, horizontally, at 37°C in a 5% CO₂ in air atmosphere. Maintain the cell density of the culture as suggested under the subculture procedure.

Allow cell aggregates to settle to the bottom of the flask, discard the supernatant medium, disperse the cells with gentle pipetting and dispense into new flasks. Subculture every 6 to 8 days.

Subcultivation Ratio: A subcultivation ratio of 1:2 to 1:4 is recommended

Medium Renewal: Twice per week

This cell line is aneuploid. Will form colonies in soft agar. It retains small cell carcinoma morphology and ultrastructure as well as APUD cell characteristics. NCI-H128 cells do well on a rotary shaker flask at 70 to 80 rpm at 37°C. It is normal for cultures of this line to have fairly large amounts of cell debris.

References and other information relating to this product are available online at www.atcc.org.
This product is sent with the condition that you are responsible for its safe storage, handling, and use. ATCC is not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to insure authenticity and reliability of materials on deposit, ATCC is not liable for damages arising from the misidentification or misrepresentation of such materials. Please see the enclosed Material Transfer Agreement (MTA) for further details regarding the use of this product. The MTA is also available on our Web site at www.atcc.org.

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

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