

Product sheet

NCI-H69AR | 305840

General information

Description NCI-H69AR is a human small cell lung carcinoma (SCLC) cell line. It is derived from a 55-year-old male patient with a primary tumor in the right lung. The cell line is characterized by its high proliferation rate and its ability to form neuroendocrine tumors. It is highly sensitive to platinum-based chemotherapy and has a high level of P-glycoprotein (P-gp) expression, which confers resistance to many anticancer drugs. NCI-H69AR is a highly metastatic cell line, with a high frequency of lung metastases. It is also highly sensitive to radiation therapy.

Organism Human

Tissue Lung

Disease Small cell lung carcinoma

Metastatic site Lung

Synonyms NCI-H69 AR, NCI-H69/AR, H69AR, H-69AR

Cell characteristics

Age 55 years

Gender Male

Ethnicity Caucasian

Morphology Small cell

Cell type Epithelial

Growth properties High proliferation rate

References and safety

Citation NCI-H69AR (ATCC CCL-221) Cytion 305840

Biosafety level 1

Product sheet

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NCBI_TaxID 9606

CellosaurusAccession CVCL_3513

ATCC CCL-221 - ATCC CCL-221

Tumorigenic Yes, Yes, Yes

Mutational profile PIK3CA, p.Gly106_Arg108del (c.317_325delGGCAACCGT), RB1, p.Glu171Ter (c.511G>T),

ATCC

Culture Medium RPMI 1640, w: 2.0 mM, w: 2.0 g/L NaHCO3 (Cytion 820700a)

Supplements 20% FBS

Dissociation Reagent

Fluid renewal 2-3

Freeze medium (FBS) + 10% DMSO

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Thawing and Culturing Cells

1. Thaw the vial rapidly in a water bath at 37°C. Do not allow the cells to reach room temperature. Transfer the cells to a pre-warmed medium.
2. Seed the cells into a pre-warmed medium in a 150 cm² flask at a density of 1-1.5 x 10⁶ cells. Incubate at 37°C with 5% CO₂.
3. After 24-48 hours, the cells should be visible. If not, check the viability and adjust the medium.
4. Once the cells are established, they can be passaged into smaller flasks (e.g., 75 cm²) at 70% confluency.
5. For long-term storage, harvest the cells and resuspend in cryopreservation medium. Store in 15 mL cryovials at -150°C.
6. Thaw the cryovials rapidly in a water bath at 37°C. Seed into a 300 x g flask at 3 x 10⁶ cells. Incubate at 37°C with 5% CO₂.
7. After 24-48 hours, the cells should be visible. If not, check the viability and adjust the medium.
8. Once the cells are established, they can be passaged into smaller flasks (e.g., 10 mL) at 10 x 10⁶ cells. Incubate at 37°C with 5% CO₂.

Incubation Atmosphere 37°C, 5% CO₂, humidified air

Flask Coating None

Shipping Conditions Cryopreserved cells should be shipped at -78°C.

Storage Conditions Cryopreserved cells should be stored at -150°C for up to 196 months.

NCI-H69AR / HLA

Sterility The cells are free of mycoplasmas and other contaminants. PCR testing confirmed the absence of mycoplasmas.