

SCLC-21H Cells | 300225

General information

Organism	Human
Tissue	Lung
Disease	Carcinoma
Metastatic site	Pleural effusion
Synonyms	SCLC21H

Characteristics

Age	46 years
Gender	Male
Ethnicity	Caucasian
Growth properties	Adherent

Identifiers / Biosafety / Citation

Citation	SCLC-21H (Cyton catalog number 300225)
Biosafety level	1

Expression / Mutation

Oncogenes	myc amplification present, c-myc expression high
Tumorigenic	Yes in nude mice
Ploidy status	Aneuploid
Karyotype	Modal chromosome number 42/43, range 39-44. Chromosome deletion 3p.

Handling

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Culture Medium	DMEM, w: 4.5 g/L Glucose, w: 4 mM L-Glutamine, w: 1.5 g/L NaHCO ₃ , w: 1.0 mM Sodium pyruvate (Cytion article number 820300a)
Medium supplements	Supplement the medium with 10% FBS
Passaging solution	Accutase
Doubling time	45 hours
Subculturing	Once or twice a week add 5 ml of fresh cell culture medium, as soon as the culture medium gets acidic. Subculture as soon as many very large clusters are observed. Dissociate the clusters by collecting the cells, rinsing once using PBS without calcium/magnesium and adding 3-5 ml Accutase. Incubate for 10 minutes at 37 degree Celsius. Collect the cells following centrifugation, resuspend in fresh cell culture medium and count.
Split ratio	A ratio of 1:2 to 1:4 is recommended
Seeding density	2 to 4 x 10 ⁴ cells/cm ²
Fluid renewal	2 to 3 times per week
Freezing recovery	Cells will recover from freezing within 24 to 48 hours.
Freeze medium	CM-1 (Cytion catalog number 800100) or CM-ACF (Cytion catalog number 806100)

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Handling of cryopreserved cultures

1. Confirm that the vial remains deeply frozen upon delivery, as cells are shipped on dry ice to maintain optimal temperatures during transit.
2. Upon receipt, either store the cryovial immediately at temperatures below -150°C to ensure the preservation of cellular integrity, or proceed to step 3 if immediate culturing is required.
3. For immediate culturing, swiftly thaw the vial by immersing it in a 37°C water bath with clean water and an antimicrobial agent, agitating gently for 40-60 seconds until a small ice clump remains.
4. Perform all subsequent steps under sterile conditions in a flow hood, disinfecting the cryovial with 70% ethanol before opening.
5. Carefully open the disinfected vial and transfer the cell suspension into a 15 ml centrifuge tube containing 8 ml of room-temperature culture medium, mixing gently.
6. Centrifuge the mixture at 300 x g for 3 minutes to separate the cells and carefully discard the supernatant containing residual freezing medium. Optionally, skip centrifugation but remove any remaining freezing medium after 24 hours.
7. Gently resuspend the cell pellet in 10 ml of fresh culture medium. For adherent cells, divide the suspension between two T25 culture flasks; for suspension cultures, transfer all the medium into one T25 flask to promote effective cell interaction and growth.
8. Adhere to established subculture protocols for continued growth and maintenance of the cell line, ensuring reliable experimental outcomes.

Quality control / Genetic profile / HLA

Sterility

Mycoplasma contamination is excluded using both PCR-based assays and luminescence-based mycoplasma detection methods.

To ensure there is no bacterial, fungal, or yeast contamination, cell cultures are subjected to daily visual inspections.

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STR profile

CSF1PO: 10
D13S317: 12
D16S539: 12
D5S818: 11,12
D7S820: 11
TH01: 9,3
TPOX: 8,9
vWA: 17
D3S1358: 15
D21S11: 29,31.2
D18S51: 14,15
Penta E: 12,13
Penta D: 9
D8S1179: 12,13
FGA: 22