

NCI-H1734 | 305833

Cell Line

Description

NCI-H1734 is a human non-small cell lung carcinoma (NSCLC) cell line. It is derived from a 56-year-old male patient with a primary tumor in the right lung. The cell line is characterized by the presence of a KRAS mutation (G12S) and a TP53 mutation (R175H). It is a highly proliferative cell line with a doubling time of approximately 48 hours. The cell line is maintained in RPMI 1640 medium supplemented with 10% fetal bovine serum (FBS) and 1% penicillin-streptomycin. It is a good model for studying the biology of NSCLC and for testing new drugs.

Organism

Human

Tissue

Lung

Disease

Non-small cell lung carcinoma

Synonyms

H1734, H-1734, NCIH1734

Cell Line

Age

56 years

Gender

Male

Ethnicity

White

Morphology

Epithelial

Growth properties

Adherent / Suspension

Cell Line

Citation

NCI-H1734 (ATCC CCL-1491) Cytion: 305833

Biosafety level

1

NCBI_TaxID

9606

CellosaurusAccession

CVCL_1491

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Cell Line Name | Cell Line ID | Cell Line Type

Mutational profile	ATM p.Gln65Pro (c.194A>C) KRAS p.Gly13Cys (c.37G>T) RB (c.818G>T)
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Cell Line Characteristics

Culture Medium	RPMI 1640 2.0 2.0 2.0 NaHCO3 (820700a)
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Supplements	10% FBS
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Dissociation Reagent	
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Seeding density	3-5*10^4/cm^2
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Fluid renewal	2-3 times per week
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Freeze medium	(10% FBS) + 10% DMSO
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Thawing and Culturing Cells	1. Thaw cells quickly in a 37°C water bath. 2. Centrifuge cells at 300 x g for 3 minutes. 3. Resuspend cells in 10 ml of complete medium. 4. Seed cells into a T25 flask at a density of 3-5 x 10^4 cells/cm^2. 5. Incubate cells in a humidified 5% CO2 incubator. 6. Monitor cell growth and confluency. 7. Pass cells when they reach 70-80% confluency. 8. Store cells in liquid nitrogen for long-term storage.
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Incubation
Atmosphere

37 °C, 5% CO₂, humidified

Shipping
Conditions

Shipped in dry ice, stored at -78 °C

Storage
Conditions

Store at -150 °C to -196 °C

NCI-H1734 cells are supplied as a suspension

Sterility

NCI-H1734 cells are supplied as a suspension (PCR) and are free of mycoplasma contamination. The cells are tested for mycoplasma contamination using the MycoTect Mycoplasma Detection Kit (MTC-100, MP Biomedicals).