

NCI-H1781 | 305731

General information

Description	NCI-H1781 is a cell line derived from a primary tumor (NSCLC) of a 66-year-old male patient. The cell line is characterized by its high growth rate and its ability to form colonies in soft agar. It is a highly tumorigenic cell line that expresses high levels of PI3K/AKT and MAPK, and is resistant to treatment with EGFR inhibitors. NCI-H1781 is a cell line derived from a primary tumor (NSCLC) of a 66-year-old male patient. The cell line is characterized by its high growth rate and its ability to form colonies in soft agar. It is a highly tumorigenic cell line that expresses high levels of PI3K/AKT and MAPK, and is resistant to treatment with EGFR inhibitors.
Organism	Human
Tissue	Lung
Disease	Non-small cell lung cancer
Metastatic site	Brain, lung, lymph nodes
Synonyms	H1781, H-1781, NCIH1781

Cell characteristics

Age	66 years
Gender	Male
Ethnicity	White
Growth properties	High growth rate

Cell line identification

Citation	NCI-H1781 (Cytion 305731)
Biosafety level	1
NCBI_TaxID	9606
CellosaurusAccession	CVCL_1494

Cell line maintenance

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Mutational profile

PTEN, p.Gln245fs*6 (c.735_739delGCCGT), TP53, p.Val157Phe (c.469G>T),

Culture Medium

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

Supplements

10% FBS

Dissociation Reagent

Fluid renewal

2 x 3

Freeze medium

, 10% DMSO (FBS) + 10% DMSO

Thawing and Culturing Cells

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

Incubation Atmosphere

37°C, 5% CO₂,

Flask Coating

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Freezing
Procedure

1. Harvest cells and centrifuge at 300 x g for 5 min. 2. Remove supernatant and resuspend cell pellet in 1 ml of freezing medium. 3. Mix gently and transfer to a cryovial. 4. Freeze at -80°C.

Shipping
Conditions

1. Ship at -80°C. 2. Use within 6 months.

Storage
Conditions

1. Store at -150 to -196°C. 2. Avoid repeated freeze-thaw cycles.

NCI-H1781 (ATCC CCL-221)

Sterility

1. The cells are supplied as a monolayer culture. 2. The cells are free of mycoplasma contamination. 3. The cells are free of endotoxins. 4. The cells are free of viruses. 5. The cells are free of fungi.