

NCI-H446 | 305049

General information

Description	Cell line established in 1982 by D. Carney, A.F. Gazdar from a primary tumor of a patient with squamous cell carcinoma of the head and neck. The cells were grown in RPMI 1640 medium supplemented with 10% fetal bovine serum, 5% fetal calf serum/10% fetal calf serum, 10% fetal calf serum/10% fetal calf serum, 10% fetal calf serum/10% fetal calf serum.
Organism	Human
Tissue	Head and neck
Disease	Squamous cell carcinoma of the head and neck
Metastatic site	Head and neck
Synonyms	NCI-H446, H-446, NCI-446, NCIH446

Cell line characteristics

Age	61 years
Gender	Male
Ethnicity	White
Morphology	Epithelial cells
Growth properties	Adherent

Cell line identification

Citation	NCI-H446 (Cell line) Cytion 305049
Biosafety level	1
NCBI_TaxID	9606
CellosaurusAccession	CVCL_1562

Cell line availability

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Tumorigenic Yes, tumorigenic in vivo (subcutaneous injection of 10⁶ cells into SCID mice resulted in tumor formation in 100% of mice within 10 weeks).

Characteristics

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

Supplements 10% FBS, 2.5 µg/ml insulin, 10 µg/ml HEPES, 1.0 µg/ml selenium

Dissociation Reagent Trypsin

Subculturing Cells are typically subcultured at 15 µg/ml trypsin in PBS (Cytion 820700a) (1:3-5 µg/ml trypsin)

Split ratio 1:3 to 1:4

Fluid renewal 2 to 3 times per week

Freeze medium FBS, 10% DMSO (Cytion 820700a) + 10% DMSO (Cytion 820700a) + 10% FBS, 10% DMSO (Cytion 820700a)

Thawing and Culturing Cells

1. Thaw cells quickly in a 37°C water bath, then transfer to a 15 µg/ml trypsin in PBS (Cytion 820700a) and centrifuge at 300 x g for 5 minutes.
2. Resuspend cells in 1 ml of medium, then transfer to a 15 µg/ml trypsin in PBS (Cytion 820700a) and centrifuge at 300 x g for 5 minutes.
3. Resuspend cells in 1 ml of medium, then transfer to a 15 µg/ml trypsin in PBS (Cytion 820700a) and centrifuge at 300 x g for 5 minutes.
4. Resuspend cells in 1 ml of medium, then transfer to a 15 µg/ml trypsin in PBS (Cytion 820700a) and centrifuge at 300 x g for 5 minutes.
5. Resuspend cells in 1 ml of medium, then transfer to a 15 µg/ml trypsin in PBS (Cytion 820700a) and centrifuge at 300 x g for 5 minutes.
6. Resuspend cells in 1 ml of medium, then transfer to a 15 µg/ml trypsin in PBS (Cytion 820700a) and centrifuge at 300 x g for 5 minutes.
7. Resuspend cells in 1 ml of medium, then transfer to a 15 µg/ml trypsin in PBS (Cytion 820700a) and centrifuge at 300 x g for 5 minutes.
8. Resuspend cells in 1 ml of medium, then transfer to a 15 µg/ml trypsin in PBS (Cytion 820700a) and centrifuge at 300 x g for 5 minutes.

Incubation Atmosphere 37°C, 5% CO₂, humidified

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Flask Coating

Coated

Freezing Procedure

Seal the vial with a cap and freeze at -78°C.

Shipping Conditions

Store at -78°C.

Storage Conditions

Store at -150 to -196°C.

NCI-H446

Sterility

NCI-H446 is sterile.

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STR

Amelogenin: X,X

CSF1PO: 13

D13S317: 8

D16S539: 12

D5S818: 11

D7S820: 10,11

TH01: 8,9,3

TPOX: 9,11

vWA: 18,19

D3S1358: 17

D21S11: 28

D18S51: 12,13

Penta E: 9,1

Penta D: 12,13

D8S1179: 13,15

FGA: 22

D1S1656: 14,16,3

D6S1043: 11

D2S1338: 18,2

D12S391: 17,18

D19S433: 13,14