NCI-H596

305277

GENERAL INFORMATION

Description

NCI-H596 □胞系来源于人类肺腺鳞癌。这种独特的□胞系被广泛用于肺癌研究，为研究腺鳞癌的特征和行为提供了一个模型，腺鳞癌是一种罕见的非小 □胞肺癌亚型，同时具有腺癌和鳞癌的特征。NCI-H596□胞系对于研究这种混合型癌症的分子和遗传基础以及测试潜在的治疗干预措施非常有价值。

NCI-H596 □胞呈现上皮形态，表达腺癌和鳞癌的标志物，包括 □胞角蛋白和粘蛋白。它们携带肺癌常见的基因改变，如 KRAS 和 TP53 基因突变，而这两种基因在□胞信号传导、生长和凋亡中起着关键作用。研究人员利用 NCI-H596 □胞探索肿瘤进展过程中涉及的信号通路，如表皮生长因子受体、 MAPK 和 PI3K/Akt 通路。这些□胞还被用于药物发现和开发，以便对化疗药物、靶向疗法和新型治疗组合进行评估。 NCI-H596 □胞系的双重组织学特征使其成为了解腺鳞癌复杂性和推进肺癌治疗策略的重要工具。

Tissue	肺部
Disease	腺鳞癌

Synonyms

- H596
- H-596
- NCI-HUT-596
- NCIH596

CLASSIFICATION

Organism	Human
Sex	Male
Growth properties	Adherent
Biosafety level	1

CHARACTERISTICS

Morphology	上皮□胞
Tumourigenic	是，在裸鼠身上

IDENTIFIERS

Citation

NCI-H596（Cytion 目录号 305277）

NCBI TaxID	9606
Cellosaurus	CVCL_1571

EXPRESSION AND SUSCEPTIBILITY

Mutational profile

突变：PIK3CA，p.Glu545Lys (c.1633G>A)，杂合；突变：RB1，p.Ser182fs*3 (c.541_542insT)，杂合；突变： TP53，p.Gly245Cys (c.733G>T)，杂合子

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HANDLING AND CULTURE

Culture medium

RPMI 1640□w□2.0 mM □□□□□□□w□2.0 g/L NaHCO3□Cytion □□□□ 820700a□□

Incubation atmosphere	37°C, 5%CO2, □□□□□

Supplements

□□□□□□□ 10% FBS

Dissociation reagent	Accutase

Subculturing

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Fluid renewal	□□ 2 □ 3 □

Thawing and culturing

Confirm that the vial remains deeply frozen upon delivery, as cells are shipped on dry ice to maintain optimal temperatures during transit.
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.
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.
Perform all subsequent steps under sterile conditions in a flow hood, disinfecting the cryovial with 70% ethanol before opening.
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.
Centrifuge the mixture at 300 x g for 3 minutes to separate the cells and carefully discard the supernatant containing residual freezing medium.
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.
Adhere to established subculture protocols for continued growth and maintenance of the cell line, ensuring reliable experimental outcomes.

QUALITY CONTROL AND CRYOPRESERVATION

Sterility

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Freeze medium	□□□□□□□□□□□□□□□ FBS□+10% DMSO □ CM-1□Cytion □□□□□□ 800100□□□□□□□□□ □□□□□□□□□□□□□□□□□CM-1□Cytion □□□□□□ 800100□□□□□□□□□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□□

Storage conditions

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Shipping conditions

□□□ -78 °C □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□

DONOR

Donor age	73 □
Ethnicity	□□

LEGAL AND SAFETY

Safety precautions

计划将低温样品储存在液氮中以便将来解冻时，必须遵守严格的安全措施。在将冷冻样本移入或移出液氮罐时，必须穿戴适当的防护手套和防护服，并使用面罩或安全护目镜。这样做是为了降低在移出时因冷冻样品爆炸而造成伤害的风险，因为爆炸可能导致锋利的碎片飞溅。

Warranty

在Cytion，我们保证产品的质量和活力。
我们保证，从我们的工厂发货后 60 天内，我们的□胞在开始培养时都是存活的。
我们保证所有材料均符合分析证书和/或产品说明书中描述的规格。
有关详□信息，请参阅我们的 <a href="" /Who-we-are/Warranty/"" hreflang=""x-default"">保修声明。

Material Transfer Agreement required	Yes

PRODUCT DETAILS

Composition table