FTC-133

305349

GENERAL INFORMATION

Description

FTC-133 □一种从淋巴结转移中提取的人类滤泡性甲状腺癌细胞系。它被广泛用于研究甲状腺癌的进展机制、对疗法的耐药性以及与肿瘤生物学相关的基因表达变化。该细胞系被用于研究分化型甲状腺癌（DTC）模型的治疗反应，特别□与耐药性和细胞凋亡途径相关的反应。涉及 FTC-133 的研究表明，它对针对 DNA 损伤反应通路的各种抑制剂（如 ATR 抑制剂 BAY 1895344）很敏感，这种抑制剂与酪氨酸激酶抑制剂联合使用时可以抑制生长、诱导凋亡并提高治疗效果。
FTC-133 细胞对了解多药耐药机制也有重要意义。例如，该细胞系对多柔比星具有耐药性，这与 P-糖蛋白（P-gp）的过度表达以及与CD47受体的相互作用有关。这些因素通过涉及 JNK 信号级联的途径导致药物吸收减少和细胞凋亡减弱。通过抑制 P-gp，可以恢复对多柔比星的敏感性，从而对这些抗药性机制进行调节。这些发现强调了 FTC-133 在探索靶向疗法和耐药途径方面的作用，为开发更有效的甲状腺癌治疗方案提供了信息。

Tissue	甲状腺
Disease	甲状腺滤泡癌

Synonyms

- FTC133

CLASSIFICATION

Organism	Human
Sex	Male
Growth properties	Adherent
Biosafety level	1

CHARACTERISTICS

Morphology	多态
Cell type	内皮细胞

IDENTIFIERS

Citation

FTC-133（Cytion 目录号 305349）

NCBI TaxID	9606
Cellosaurus	CVCL_1219

EXPRESSION AND SUSCEPTIBILITY

Protein expression

5' - 脱碘酶 I 型的表达

Mutational profile

突变：FLCN，p.His429Thrfs*39 (c.1285delC)，同型突变：MSH6，p.Lys1045fs (c.3135delG)，同型突变NF1，p.Cys167Ter (c.501T>A)，同卵双生突变：PTEN，p.Arg130Ter (c.388C>T)，同卵双生突变：TERT，c.1-124C>T（c.228C>T）（C228T），同型突变：TP53，p.Arg273His (c.818G>A)，同型

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HANDLING AND CULTURE

Culture medium

DMEM:Ham's F12□1:1□□w: 3.1 g/L □□□□w: 2.5 mM L-□□□□□w: 15 mM HEPES□w: 0.5 mM □□□□□w: 1.2 g/L NaHCO3□Cytion □□□□ 820400a□□

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

Supplements

□□□□□□□ 10% FBS

Dissociation reagent	Accutase

Subculturing

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Seeding density	1 - 5 × 10^4 □□□/□□□□

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	42 □
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 □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，我们的细胞在开始培养时都 □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。
有关详细信息，请参阅我们的 <a href="" /Who-we-are/Warranty/"" hreflang=""x-default"">保修声明。

Material Transfer Agreement required	Yes

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