KYSE520

305449

GENERAL INFORMATION

Description

KYSE520 □胞系是一种人类食管鳞状□胞癌 (ESCC) 模型，来源于原发肿瘤。它属于中度分化型，在研究食管癌的上皮 -间质可塑性（EMP）方面发挥了重要作用。KYSE520 □胞具有异质性，由上皮样（CD44v+）和间质样（CD44v-）亚群组成。这两个亚群能够相互转化，反映了一个动态的 EMP 过程。这一特性使KYSE520成为研究ESCC中癌症干□胞特征和化疗抗性机制的绝佳模型。

在遗传学上，KYSE520□胞显示出显著的表观遗传调控。在这些□胞中，肿瘤抑制因子JAM3基因的启动子区域未被甲基化，允许其表达。 JAM3 通过 Wnt/β-catenin 信号在调节□胞增殖、迁移和侵袭方面发挥作用。维持 KYSE520 中 JAM3 的表达与抑制侵袭性癌症表型有关。

在治疗研究中，KYSE520 □胞被用来探索成纤维□胞生长因子受体样 1（FGFRL1）的作用。研究表明，FGFRL1缺陷的KYSE520□胞表现出肿瘤生长和运动减弱，同时基质金属蛋白酶-1（MMP-1）和成纤维□胞生长因子结合蛋白1（FGFBP1）表达减少。这些发现强调了 FGFRL1 在肿瘤发生中的重要性，并提出了潜在的治疗靶点。此外， KYSE520 □胞中的EMP动态和相关分子通路有助于深入了解ESCC的进展和耐药机制，从而促进靶向治疗的开发。

Tissue	食道
Disease	鳞状□胞癌

Synonyms

- KYSE 520
- KYSE-520
- Kyse520
- KYSE0520

CLASSIFICATION

Organism	Human
Sex	Female
Growth properties	Adherent
Biosafety level	1

CHARACTERISTICS

Morphology	上皮样

IDENTIFIERS

Citation

KYSE520（Cytion 目录号 305449）

NCBI TaxID	9606
Cellosaurus	CVCL_1355

EXPRESSION AND SUSCEPTIBILITY

Oncogenes

TP53 ´ MYC

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Mutational profile

□□□TP53□c.376-2A>T□□□□□□□□

HANDLING AND CULTURE

Culture medium

Ham's F12□w: 1.0 mM □□□□□□□w: 1.0 mM □□□□□w: 1.1 g/L NaHCO3□Cytion □□□□ 820600a□+ RPMI 1640□w: 2.0 mM □□□□□□□w: 2.0 g/L NaHCO3□Cytion □□□□ 820700a□□1:1 □□□

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

Supplements

□□□□□□□ 2% □ FBS

Dissociation reagent	Accutase

Subculturing

□□□□□□□□□□□□□□□□□□□□ PBS □□□T25 □□□ 3-5 □□ PBS□T75 □□□ 5-10 □□□□□□ Accutase □□□□□□□T25 □□□ 1-2 □□□T75 □□□ 2.5 □□□□□□□□□□□□ 8-10 □□□□□□□□□□□□□ 10 □□□□□□□□□□□□□□□□□□□ 300xg □□ 3 □□□□□□□□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□□□□□

Seeding density	0.6 - 1.2 × 10^4 □□□/□□□□
Fluid renewal	□□ 2 □

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

□□□□ PCR □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
□□

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

Storage conditions

□□□□□□□□□□□□□□□□□□□□□□□□□□ -150 □ -196 ℃□□-80 °C□□□□□□□□□□□□□□□□□□□

Shipping conditions

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

DONOR

Donor age	58 □

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Ethnicity	日语

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

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