SUM149PT

300609

GENERAL INFORMATION

Description

SUM149PT □胞系来源于人类炎性乳腺癌（IBC），它是乳腺癌的一种侵袭性亚型。IBC 的特点是进展快、转移早、预后差。SUM149PT □胞被归类为三阴性乳腺癌（TNBC），缺乏雌激素受体（ER）、孕激素受体（PR）和 HER2 受体的表达，因此对内分泌治疗或 HER2 抑制剂等常见靶向疗法没有反应。相反，这类癌症的治疗通常包括 □胞毒性化疗，但随着时间的推移，这些癌症经常会产生抗药性。

值得注意的是，SUM149PT □胞具有 2288delT BRCA1 突变，导致 BRCA1 功能丧失。这种突变是一种移帧缺失，会导致 BRCA1 蛋白质过早终止，损害 DNA 修复并促进基因组不稳定性，而这正是 BRCA1 突变癌症的特征。BRCA1 的缺失导致 SUM149PT 中观察到的染色体不稳定性增加，表现出许多染色体畸变。除了突变之外， SUM149PT 中还丢失了 BRCA1 基因座，这进一步加剧了对基因组稳定性的影响。

令人惊讶的是，SUM149PT□胞表现出CD44+/CD24-/Low干样癌□胞亚群，该亚群富含癌症干□胞（CSC）特性，如侵袭性增强、肿瘤发生和对化疗的抗性。这些干样 □胞还与中心体扩增和□胞周期蛋白 E/Cdk2 活性升高有关。抑制SUM149PT中的Cdk2可选择性地靶向这一CSC亚群，恢复对化疗的一些敏感性，这表明针对 Cdk2和传统化疗的联合治疗策略可能会有效治疗化疗耐药的 IBC。

Tissue	乳房
Disease	乳腺炎症癌

Synonyms

- SUM-149PT
- SUM 149PT
- SUM149-PT
- SUM149
- SUM-149
- SUM 149
- 149 PT
- 149PT
- BrCL12

CLASSIFICATION

Organism	Human
Sex	Female
Growth properties	Adherent

CHARACTERISTICS

Morphology	上皮□胞

IDENTIFIERS

Citation

SUM149PT （Cytion 目录编号 300609）

NCBI TaxID	9606
Cellosaurus	CVCL_3422

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EXPRESSION AND SUSCEPTIBILITY

Protein expression

P53 □□

HANDLING AND CULTURE

Culture medium

Ham's F12□w□1.0 mM □□□□□□□w□1.0 mM □□□□□w□1.1 g/L NaHCO3□Cytion □□□□ 820600a□□

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

Supplements

□□□□□□□ 10% FBS

Dissociation reagent	Accutase

Subculturing

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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	40 □

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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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