OVCAR-5

305616

GENERAL INFORMATION

Description

OVCAR-5 □一种人类卵巢癌细胞系，由一名未经治疗的患者的肿瘤建立。该细胞系 □研究高级别卵巢癌生物学的可靠模型，对于研究对铂类化疗药物的反应以及化疗耐药性的分子机制尤为重要。OVCAR-5 已被广泛用于临床前药物开发和癌症生物学研究。

OVCAR-5 细胞呈上皮形态，在标准培养条件下以粘附单层形式生长。与其他来自化疗耐药患者的 OVCAR 系列细胞系不同，OVCAR-5 来自化疗无效的肿瘤，为探索肿瘤的内在特性提供了一个基准模型。值得注意的□，OVCAR-5 表达金属硫蛋白，这□一种与细胞对重金属和氧化应激反应有关的蛋白质，但这并不一定会像在该系列其他细胞系中观察到的那样赋予顺铂抗性。该细胞系对顺铂的敏感性与化疗耐药患者的细胞系不同，其顺铂的 IC50 值为 0.61 μM。

在研究中，OVCAR-5 被用于筛选新型化疗药物、评估靶向疗法和研究药物组合，以改善卵巢癌的治疗效果。它还被用于探索高级别卵巢癌的遗传和表观遗传景观，包括 DNA损伤修复途径、信号网络和肿瘤微环境。OVCAR-5 仍□促进了解和治疗卵巢癌的重要工具。

Tissue	腹水
Disease	卵巢腺癌
Metastatic site	腹水

Synonyms

- OVCAR 5
- NIH:OVCAR-5
- OVCAR.5
- OVCAR5
- Ovcar5
- OVCA5

CLASSIFICATION

Organism	Human
Sex	Female
Growth properties	Adherent
Biosafety level	1

CHARACTERISTICS

Doubling time	27 小时

IDENTIFIERS

Citation

OVCAR-5（Cytion 目录号 305616）

NCBI TaxID	9606
Cellosaurus	CVCL_1628

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Banking information
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EXPRESSION AND SUSCEPTIBILITY

Mutational profile

□□□KRAS□□□□p.Gly12Val (c.35G>T)□□□□

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
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	67 □
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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