Calu-3

305032

GENERAL INFORMATION

Description

Calu-3 □胞是一种人类上皮□胞系，来源于 1975 年一名 25 岁患者的肺腺癌。这些□胞呈现上皮形态，其特点是能够形成紧密连接、脱膜和微绒毛，反映了肺上皮 □胞的结构特征。

Calu 3 □胞尤其以大量分泌粘蛋白而著称，粘蛋白是一种参与保护和润滑肺气道的糖蛋白，因此是研究气道上皮生物学（包括粘蛋白的产生、分泌及其调控）的相关体外模型。

Calu-3 人肺腺癌□胞被用于药物发现和开发，特别是用于评估吸入药物的吸收、分布、代谢和排泄（ ADME）。它们在可渗透的支持物上培养时能形成极化单层，因此适合研究药物转运和药物对气道上皮□胞的影响。

Calu 3 □胞来源于人类肺癌□胞类型，对研究气道上皮□胞及其在呼吸系统疾病中的作用尤为重要。这些 □胞来源于支气管粘膜下腺体，被用于模拟人类气道的 □胞培养模型，为呼吸功能、上皮□胞损伤、肺损伤以及囊性纤维化或 SARS 等疾病的研究提供启示。

对 Calu 3 □胞及其对化疗药物反应的研究有助于更广泛的肺癌研究领域，为了解治疗效果和开发更有效的治疗策略提供了可能性。

Tissue	肺腺癌
Disease	肺腺癌
Metastatic site	胸腔积液

Synonyms

- CaLu-3
- CALU-3
- Calu 3
- Calu3
- CALU3

CLASSIFICATION

Organism	Human
Sex	Male
Growth properties	Adherent
Biosafety level	1

CHARACTERISTICS

Morphology	上皮□胞
Tumourigenic	是

IDENTIFIERS

Citation

Calu-3（Cytion 产品编号 305032）

NCBI TaxID	9606
Cellosaurus	CVCL_0609

Cytion GmbH
Nikola-Tesla-Str. 3
69124 Heidelberg
Tel: +49 (0)6221 405780
info@cytion.com
cytion.com

Registered office Heidelberg
VAT ID: DE283292917
Local court Mannheim - HRB 714394
CEO / Geschäftsführer: Jonathan Steubing

Banking information
Sparkasse Heidelberg
IBAN: DE35 6725 0020 0009 2076 86
BIC: SOLADES1HDB

EXPRESSION AND SUSCEPTIBILITY

Protein expression

A □□□Rh□

Antigen expression

□□□□□A □□□Rh□

HANDLING AND CULTURE

Culture medium

EMEM□MEM Eagle□□w□2 mM L-□□□□□w□2.2 g/L NaHCO3□w□EBSS□Cytion □□□□ 820100a□□

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

Supplements

□□□□□□□ 10% FBS □ 1% NEAA

Dissociation reagent	Accutase

Subculturing

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

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

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

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

Storage conditions

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

Shipping conditions

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

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DONOR

Donor age	25 年

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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