CT26.CL25

305353

GENERAL INFORMATION

Description

CT26.CL25□胞系是一种小鼠结肠癌模型，来源于亲代 CT26□胞系，后者是一种化学诱导的未分化结肠癌，来源于 BALB/c小鼠。CT26.CL25经过基因改造，能表达β-半乳糖苷酶（β-gal）蛋白，是研究肿瘤免疫学和免疫疗法，特别是肿瘤相关抗原（ TAAs）的绝佳模型。通过这种改造，可以针对作为新抗原的 β-gal进行特异性免疫学研究，从而促进肿瘤免疫逃避机制的研究以及癌症疫苗或采用性 □胞疗法的开发。

CT26.CL25 已被用于临床前模型，以研究免疫反应和免疫疗法的疗效，如使用负载有肿瘤相关抗原的树突状 □胞 (DC)。研究表明，使用从逆转录病毒抗原（如 gp70）中提取的多肽脉冲 DC 的免疫策略可引起强有力的抗肿瘤免疫反应。在实验模型中，观察到了针对 gp70 的 CD8+ □胞毒性 T 淋巴□胞（CTL）的活化，这证明了□胞系在测试免疫治疗方法中的实用性。然而，用这种多肽载荷的 DCs 进行免疫有其局限性，特别是在治疗已确诊的转移瘤方面，这凸显了将预防性免疫反应转化为治疗效果所面临的挑战。

此外，CT26.CL25 经常被用于测试联合免疫疗法的疗效，如使用免疫检查点抑制剂或癌症疫苗。例如，有研究评估了节律化疗联合免疫检查点抑制剂的影响，其中 CT26.CL25 诱导免疫原性□胞死亡（ICD）对增强抗肿瘤免疫反应至关重要。这些研究表明，以免疫检查点为靶点可与化疗协同提高肿瘤排斥率并建立长期免疫记忆。

Tissue	结肠
Disease	腺癌

Synonyms

- CT26-clone 25

CLASSIFICATION

Organism	Mouse
Sex	Female
Growth properties	Adherent
GMO status	GMO-S1

GMO status details

GMO-S1: This murine colon carcinoma cell line (CT26.CL25) contains a retroviral vector encoding lacZ and Tn5-neo, enabling β-galactosidase expression and neomycin resistance. The construct is stably integrated into CT26 cells. This classification applies only within Germany and may differ elsewhere.

Biosafety level	1

CHARACTERISTICS

Morphology	成纤维□胞
Tumourigenic	是，在 BALB/c 小鼠中

IDENTIFIERS

Citation

CT26.CL25（Cytion 目录号 305353）

NCBI TaxID	10090
Cellosaurus	CVCL_7255

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

Antigen expression

H-2d

Mutational profile

□□□□□□□□□□Cdkn2a□□□□□□□□Kras□p.Gly12Asp□c.35G>A□□□□□Kras□p.Gly12Asp (c.35G>A)□□□

Products

□□□□□□β-□□□□□□β-gal□□H-2D

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□1% NEAA□0.4 mg/mL G418□2.5 g/L □□□□ 10 mM HEPES□

Dissociation reagent	Accutase

Subculturing

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

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

DONOR

Breed / subspecies	BALB/c
Donor age	未说明

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