BALB/3T3 clone A31

305155

GENERAL INFORMATION

Description

BALB/3T3 □隆 A31 是由 S.A. Aaronson 和 G.T. Todaro 于 1968 年开发的成纤维细胞系，来源于 14 至 17 天大的 BALB/c 小鼠胚胎。这种细胞系是研究细胞生物学的基本工具，特别是其支持病毒生长的能力和对致癌转化的敏感性。从特征上看，这些细胞是纺锤形成纤维细胞，可作为多潜能间充质细胞。它们具有根据微环境影响或培养条件分化成各种组织的潜能，这凸显了它们在实验模型中的多功能性。

BALB/3T3 □隆 A31 的细胞培养方法包括在达到汇合前反复转移，以尽量减少细胞间的接触，从而促进细胞分裂的接触抑制、高稀释度生长和低饱和密度等特性。这些细胞的核型多变，染色体数目一般为 78 条，从 62 条到 109 条不等，主要是端心或尖心染色体。尽管偶尔有关于细胞遗传不稳定的报道，但 BALB/3T3 A31 细胞仍保持着非致瘤性状态，不过在半固体培养基中培养时会显示出致瘤性。值得注意的是，它们极易受致癌 DNA 病毒（如 SV40 和小鼠肉瘤病毒）的影响而发生转化，但对外皮瘤病毒（鼠痘）的检测呈阴性，这为病毒学和肿瘤学研究增添了新的价值。

Tissue	胚胎

Synonyms

- BALB/c 3T3 clone A31
- Balb/c3T3
- BALB/c 3T3
- Balb/c 3T3
- BALB/3T3
- Balb/3T3-4-Cl31
- 3T3 clone A31
- BALB/3T3 cl. A31
- BALB 3T3 clone A31
- BALB/3T3 (clone A31)
- B/C3T3
- 3T3-A31
- 3T3(A31)
- A31
- A31N

CLASSIFICATION

Organism	Mouse
Growth properties	Adherent
Biosafety level	1

CHARACTERISTICS

Morphology	成纤维细胞
Tumourigenic	不，这些细胞在免疫抑制小鼠体内不会致瘤，但在半固体培养基中会形成菌落。

IDENTIFIERS

Citation

BALB/3T3 □隆 A31（Cytion 产品编号 305155）

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

NCBI TaxID	10090
Cellosaurus	CVCL_0184

HANDLING AND CULTURE

Culture medium

DMEM□w□4.5 □/□□□□□w□4 □□□ L-□□□□□w□3.7 □/□ NaHCO3□w□1.0 □□□□□□□□Cytion □□ 820300a□□

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

Supplements

□□□□□□□ 10% FBS

Dissociation reagent	Accutase

Subculturing

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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

Breed / subspecies	BALB/c
Donor age	□□□□□ 14 □ 17 □

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，我们的细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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