NB-4

300299

GENERAL INFORMATION

Description

NB-4 □胞是一种人类急性早幼粒□胞白血病（APL）□胞系，它是从一名急性早幼粒□胞白血病二次复发患者的骨髓中提取的。这种□胞系的特点是存在 t(15;17) 染色体易位，导致 PML-RARα 融合基因，这是 APL 的标志。NB4 □胞系是研究 APL 发病机制以及视黄酸（ATRA）和三氧化二砷（ATO）等诱导分化的治疗药物作用机制的重要模型。

作为一种早幼粒□胞白血病□胞系，NB-4 □胞表现出 APL 所特有的异常分化模式。这种反常性为了解白血病进展的 □胞机制和治疗干预的潜力提供了一个独特的窗口。 NB-4 □胞在接触某些化疗药物或视黄酸等分化诱导剂后会发生 □胞凋亡或程序性□胞死亡，这使它们成为研究白血病 □胞凋亡的宝贵工具。NB-4 □胞系还具有双系潜能，突显了其在特定条件下沿着多个造血系分化的能力。

总之，NB-4 □胞系具有独特的特性和对维甲酸等分化诱导剂的反应性，对于研究早幼粒 □胞白血病和更广泛的肿瘤学领域的研究人员来说，它仍然是一个举足轻重的资源。

Tissue	骨髓
Disease	急性早幼粒□胞白血病

Synonyms

- NB4
- NB.4

CLASSIFICATION

Organism	Human
Sex	Female
Growth properties	Suspension
Biosafety level	1

CHARACTERISTICS

Morphology	圆形电池
Cell type	B 淋巴□胞

Karyotype

T(15,17) (q22,q11-12) 易位

Doubling time	35 至 40 小时

IDENTIFIERS

Citation

NB-4（Cytion 目录号 300299）

NCBI TaxID	9606
Cellosaurus	CVCL_0005

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Banking information
Sparkasse Heidelberg
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EXPRESSION AND SUSCEPTIBILITY

Antigen expression

cd4+□cd14-□cd36-

Reverse transcriptase	□□

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

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	23 □
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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