OCI-AML2

305609

GENERAL INFORMATION

Description

OCI-AML2 □一种源自急性髓母细胞白血病（未成熟型， FAB 分类 M1）患者外周血的人源性急性髓系白血病（ AML）细胞系。 该细胞系被广泛用作研究AML生物学特性的模型，AML□一种血液系统恶性肿瘤，其特征 □骨髓和外周血中未分化髓系前体细胞的克隆性增殖。 OCI-AML2 细胞为白血病发病机制研究、药物筛选以及治疗干预分子靶点的鉴定提供了一个有价值的工具。

OCI-AML2 细胞以悬浮方式生长，并表现出与未成熟髓系细胞一致的特征。这些细胞具有通常与 AML 相关的遗传和分子异常，包括致癌基因和肿瘤抑制基因的突变，以及参与细胞存活、增殖和分化的信号传导通路失调。 研究人员利用该细胞系探究驱动白血病发生的机制，包括转录调节因子和表观遗传修饰因子在维持白血病原始细胞未分化状态中的作用。

该细胞系在临床前研究中对于评估化疗药物、靶向治疗及联合治疗的疗效具有特别重要的价值。它常被用于测试针对关键信号通路的抑制剂，例如 FLT3、MEK/ERK和PI3K/AKT/mTOR通路，这些通路对AML细胞的存活和增殖至关重要。 此外，OCI-AML2还被用于耐药性研究以及急性髓系白血病（ AML）个性化治疗方案的开发。总体而言，OCI-AML2□一个强大且可靠的模型系统，有助于推进急性髓系白血病的研究并开发新型治疗策略。

Tissue	外周血
Disease	髓系白血病

Synonyms

- OCI/AML-2
- OCIAML-2
- OCI-AML2
- OCI/AML2
- OCI AML2
- OCIAML2
- AML-2
- Ontario Cancer Institute-Acute Myeloid Leukemia-2

CLASSIFICATION

Organism	Human
Sex	Male
Growth properties	Suspension
Biosafety level	1

CHARACTERISTICS

Morphology	单个、圆形至椭圆形的细胞
Cell type	上皮细胞
Doubling time	30 小时

IDENTIFIERS

Citation

OCI-AML2（Cytion 产品编号 305609）

NCBI TaxID	9606

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Cellosaurus	CVCL_1619

EXPRESSION AND SUSCEPTIBILITY

Antigen expression

CD3-□CD4+□CD13+□CD15+□CD19-□CD33+□CD34-□cyCD68+□HLA-DR+

Mutational profile

□□□□□AFDN + HGNC□7132□KMT2A□□□=KMT2A-AFDN□MLL-MLLT4□MLL-AF6□

HANDLING AND CULTURE

Culture medium

Alpha MEM□□□□2.0 mM □□□□□□□□□□□□□□□□□□□□1.0 mM □□□□□□□□2.2 g/L $NaHCO_3$

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

Supplements

□□□□□□□ 10% □□□ FBS

Seeding density	2 × 10^6 □□□/□□
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	65 □

Ethnicity	高加索人

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