SKM-1

305627

GENERAL INFORMATION

Description

SKM-1□胞系是一种人类白血病模型，由一名急性单核 □胞白血病患者的外周血建立而成，该患者的疾病源于骨髓增生异常综合征（ MDS）。 这些□胞呈现未成熟形态特征，如核质比高、□小的嗜天青颗粒，使其成为研究白血病分子和 □胞机制的理想模型，特别是研究MDS向急性髓系白血病（AML）转化的过程。

SKM-1□胞的基因分析揭示了重要染色体异常，包括 del(9)(q13;q22)和der(17)t(17:?)(p13:?)；后者涉及p53基因，该基因在此□胞系中过度表达并携带突变。这些发现凸显了p53在髓系恶性肿瘤克隆演变与进展中的关键作用。 SKM-1□胞还具有表达髓单核□胞标志物（包括CD4、CD13和CD33）的特征，并呈现丁酸酯酶活性阳性，这与其单核 □胞谱系相吻合。

该□胞系广泛应用于白血病发生机制、药物耐药性及白血病分子通路研究。例如， SKM-1为探究p53功能障碍及其他遗传缺陷对□胞增殖和治疗反应的影响提供了研究平台，同时也是探索骨髓增生异常综合征和继发性急性髓系白血病新型治疗策略的理想模型。

Tissue	外周血
Disease	急性髓系白血病

Synonyms

- SKM1

CLASSIFICATION

Organism	Human
Sex	Male
Growth properties	Suspension
Biosafety level	1

CHARACTERISTICS

Morphology	圆形电池
Doubling time	48 小时

IDENTIFIERS

Citation

SKM-1（赛迪昂产品编号 305627）

NCBI TaxID	9606
Cellosaurus	CVCL_0098

EXPRESSION AND SUSCEPTIBILITY

Antigen expression

CD3-，CD4+，CD13+，CD14-，CD15+，CD19-，CD33+，HLA-DR+；

Mutational profile

突变：ASXL1，简单突变，p.Tyr591Ter (c.1773C>A)，纯合子；突变：BCORL1，简单突变，c.4619-1G>A，纯合子，剪接受体突变；突变：EZH2，简单突变，p.Tyr646Cys（c.1937A>G），杂合子；突变：KRAS，单点突变，p.Lys117Asn（c.351A>C），纯合子；突变：TP53，单点突变，p.Arg248Gln（c.743G>A），纯合子

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Viruses

EBV -□HBV -□HCV -□HIV-1 -□HIV-2 -□HTLV-1/2 -□MLV -□SMRV -

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

□□□□□□□ 15% □ FBS

Dissociation reagent	□
Seeding density	0.3□1×10⁶□□□/□□
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	76 □
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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