KMS-12-PE

300286

GENERAL INFORMATION

Description

□同一患者胸腔积液中提取的 KMS-12-PE 细胞系在多个方面与 KMS-12-BM 有明显不同。KMS-12-PE细胞代表了分化更晚期的浆细胞阶段， CD20缺失，但CD38和PCA-1继续表达。KMS-12-PE 的一个显著特点是，无论是在患者胸腔积液中还是在培养过程中，它都能异位产生和分泌唾液型淀粉酶，这使它成为人类骨髓瘤细胞系中独一无二的细胞。这种现象与淀粉酶基因所在区域附近的染色体缺失有关，特别是在相当大比例的 KMS-12-PE 细胞中观察到的 del(1)(p22→pter)。
尽管存在这些明显的差异，KMS-12-PE 和 KMS-12-BM 都具有相同的克隆标记，即骨髓瘤病例中常见的 t(11;14)(q13;q32)易位。不过，KMS-12-PE 细胞的染色体异常少于KMS-12-BM，而且往往是低二倍体。与KMS-12-BM一样，KMS-12-PE也不产生表面或分泌型免疫球蛋白，尽管细胞具有发达的内质网。尽管这两种细胞系在体外生长具有侵袭性，但它们都没有致瘤性，而且在无血清培养基中长期稳定增殖，这使它们成为研究骨髓瘤生物学的重要工具，尤其是在不产生免疫球蛋白的骨髓瘤中。

Tissue	胸腔积液
Disease	多发性骨髓瘤

Synonyms

- KMS 12 PE
- KMS-12_PE
- KMS-12PE
- KMS12-PE
- KMS12PE
- Kawasaki Medical School-12-Pleural Effusion

CLASSIFICATION

Organism	Human
Sex	Female
Growth properties	Suspension
Biosafety level	1

CHARACTERISTICS

Morphology	圆形电池
Cell type	B 细胞
Tumourigenic	对裸鼠无致瘤性

IDENTIFIERS

Citation

KMS-12-PE（Cytion 目录号 300286）

NCBI TaxID	9606
Cellosaurus	CVCL_1333

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Banking information
Sparkasse Heidelberg
IBAN: DE35 6725 0020 0009 2076 86
BIC: SOLADES1HDB

EXPRESSION AND SUSCEPTIBILITY

Surface antigens

cd3 -, cd4 -, cd13 -, cd14 -, cd15 -, cd19 -, cd20 -, cd34 -, cd38 +, cd138 +, hla-dr +, pca-1 +

Mutational profile

□□□t(11;14)(q13;q32)

Products

□□□□□□□□

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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Seeding density	5 × 10⁵ □□□/□□

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	64 □

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Ethnicity	日语

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，□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