B-LCL-CDG1

302012

GENERAL INFORMATION

Description

B-LCL-CDG1□一种经EBV转化的B淋巴细胞系，来源于一名被诊断患有先天性糖基化障碍（ CDG）--PMM2-CDG的患者。这种罕见的代谢紊乱□由*PMM2*基因突变引起的，该基因编码磷酸甘露糖化酶2（PMM2），这□糖基化途径中的一种重要酶。 PMM2*基因突变会破坏糖基化寡糖链的合成，导致组织和血液中各种糖蛋白和糖磷脂的糖基化缺陷。这种疾病以多系统表现为特征，通常会影响神经、肝脏和内分泌功能。

B-LCL-CDG1□一种经EBV转化的淋巴母细胞系，它为研究 *PMM2*缺乏症的分子和细胞后果提供了一个宝贵的体外模型。这种细胞系可用于研究糖基化缺陷、 PMM2 酶活性和潜在的治疗干预，包括基因矫正和底物补充。 B-LCL-CDG1以及其他CDG患者衍生细胞系□了解CDG病理生理学和评估这些疾病的新型治疗策略的重要资源。

Tissue	外周血
Disease	先天性糖基化紊乱
Metastatic site	不适用（EBV转化性B细胞淋巴细胞样细胞瘤；无转移）

Applications

免疫细胞中 CDG 作用的基因分型。功能检测（如 B 细胞表面抗原）。细胞毒性药物测试突变分析细胞凋亡机制分析。 HLA 类型鉴定。不同细胞糖蛋白的糖基化缺陷对不同功能的影响。

CLASSIFICATION

Organism	Human
Sex	Female
Growth properties	Suspension
GMO status	GMO-S2

GMO status details

GMO-S2: This B-LCL contains a stably maintained EBV episome encoding viral latent-phase genes (EBNA-1/-2/-3, LMP-1/-2). EBV is classified as a risk group 2 pathogen; BSL-2 containment required. This classification applies within Germany; regulations may differ elsewhere.

Biosafety level	2

CHARACTERISTICS

Morphology	圆形电池
Cell type	B 淋巴细胞

IDENTIFIERS

Citation

B-LCL-CDG1（Cytion 目录号 302012）

NCBI TaxID	9606
Cellosaurus	Not assigned

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

EXPRESSION AND SUSCEPTIBILITY

Viruses

□□□□EBV

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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Fluid renewal	□□□□□□□□□□

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

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 □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

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