BEAS-2B

300311

GENERAL INFORMATION

Description

BEAS-2B □一种永生化细胞系，来源于非癌症患者的支气管上皮细胞。这种细胞系 □用腺病毒 12-SV40 杂交病毒转化人类支气管上皮细胞而建立的，这种病毒能延长细胞的寿命，同时保持原发性支气管上皮细胞的许多典型形态和功能特征。由于 BEAS-2B 细胞来源于气道上皮细胞，因此被广泛用于呼吸系统疾病研究，特别 □与可吸入物质的毒理和药理作用有关的研究。

该细胞系在培养时呈现鹅卵石形态，并保留了某些关键特征，如代谢异生物化合物的能力，因此与药物代谢和呼吸系统毒理学研究高度相关。它们还被广泛用于探索哮喘、慢性阻塞性肺病（COPD）和癌症的细胞机制。BEAS-2B 细胞对细胞因子、氧化应激和其他典型的呼吸道暴露于环境因素的刺激有可预测的反应。这使它们成为研究肺细胞炎症和氧化应激机制的宝贵模型。

作为生物医学研究的一种工具，BEAS-2B 细胞还经常被用于评估空气传播颗粒的致癌潜力。 BEAS-2B细胞的遗传结构和对遗传操作的易感性进一步提高了它们在分子生物学实验中的实用性，这些实验旨在了解肺部疾病和癌症发展所涉及的基因表达和信号通路。

Tissue	肺、支气管

Synonyms

- Beas-2B
- BEAS 2B
- BEAS2B
- Beas2B
- Bronchial Epithelium transformed with Ad12-SV40 2B

CLASSIFICATION

Organism	Human
Sex	Male
Growth properties	Adherent
GMO status	GMO-S1

GMO status details

GMO-S1: This human bronchial epithelial cell line (BEAS-2B) contains an Ad12-SV40 hybrid construct introduced by transfection, enabling immortalization without viral particle release. The hybrid adenovirus/SV40 insert is stably integrated. This classification applies only within Germany and may differ elsewhere.

Biosafety level	1

CHARACTERISTICS

Morphology	上皮样

IDENTIFIERS

Citation

BEAS-2B（Cytion 目录号 300311）

NCBI TaxID	9606
Cellosaurus	CVCL_0168

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

EXPRESSION AND SUSCEPTIBILITY

Viruses

Ad12-SV40 □□□□

Products

□□□□SV-40 T □□

HANDLING AND CULTURE

Culture medium

□□□□□□□□□□□□PromoCell GmbH□

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

Supplements

□□□□□□□□□□□□PromoCell GmbH□□□□□□

Dissociation reagent	Accutase

Subculturing

□□□□□□□□□□□□□□□□□□□□□ PBS □□□T25 □□□ 3-5 □□ PBS□T75 □□□ 5-10 □□□□□□ Accutase □□□□□□□T25 □□□ 1-2 □□□T75 □□□ 2.5 □□□□□□□□□□□□ 8-10 □□□□□□□□□□□□□ 10 □□□□□□□□□□□□□□□□□□□ 300xg □□ 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	□□□□

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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