HK EGFP-Cap-D2

300675

GENERAL INFORMATION

Description

HK EGFP-Cap-D2 □胞系是 Hela Kyoto □胞的工程变体，专门用于□胞生物学和基因工程的高级研究。该□胞系表达与 D2 多巴胺受体 C 端融合的增强型绿色荧光蛋白（EGFP），可在荧光显微镜下实时观察受体的动态和分布。这一特性尤其有利于研究受体的贩运、信号传导途径以及药理作用对 D2 受体行为的影响。

这些□胞被广泛用于神经学研究，以更好地了解多巴胺信号转导的基本机制，多巴胺信号转导对帕金森病、精神分裂症和抑郁症等许多神经系统疾病至关重要。 EGFP 与 D2 受体的融合不会影响受体的正常功能或□胞定位，这使得 HK EGFP-Cap-D2 成为生理学和病理学研究的重要工具。 EGFP 的稳定表达还允许在活□胞中进行纵向研究，从而深入了解受体调节以及与其他□胞成分相互作用的动态过程。

Tissue	子宫颈
Disease	癌症

Synonyms

- HeLa Kyoto EGFP CAP-D2
- HeLa Kyoto Cap-D2 EGFP

CLASSIFICATION

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

GMO status details

GMO-S1: This HeLa Kyoto line contains an EGFP-Cap-D2 construct enabling live-cell studies of condensin-II dynamics. This classification applies only within Germany and may differ elsewhere.

Biosafety level	1

CHARACTERISTICS

Morphology	具有镶嵌石形状的上皮样□胞

IDENTIFIERS

Citation

HK EGFP-Cap-D2（Cytion 目录号 300675）

NCBI TaxID	9606
Cellosaurus	CVCL_1D60
Depositor	艾伦伯格实验室（EMBL）

EXPRESSION AND SUSCEPTIBILITY

Protein expression

EGFP-CAP-D2□□ 80% □□□□□□□□□□/□□□1...589 / Pcmv, 619...645 / Flag-tag, 646...660, 1375...1389/null, 661...1374 / EGFP, 1435...5638/CAP-D2, 6886...7680/KanR/NeoR

Products

CMV □□□□□FLAG □□□□□□□□□□□□□□□□□□□□

HANDLING AND CULTURE

Culture medium

DMEM□w□4.5 □/□□□□□w□4 □□□ L-□□□□□w□3.7 □/□ NaHCO3□w□1.0 □□□□□□□□Cytion □□ 820300a□□

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

Supplements

□□□□□□□ 10% FBS

Dissociation reagent	Accutase

Subculturing

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

Seeding density	1 × 10^4 □□□/□□□□
Fluid renewal	□□ 2 □ 3 □
Post-thaw recovery	□□□□□□□□5×10^4□□□/□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□24□□□

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

□□□□ PCR □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
□□

Freeze medium	□□□□□□□□□□□□□□□ FBS□+10% DMSO □ CM-1□Cytion □□□□□□ 800100□□□□□□□□□ □□□□□□□□□□□□□□□□□CM-1□Cytion □□□□□□ 800100□□□□□□□□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□□

Storage conditions

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Shipping conditions

冷冻保存的□胞系用干冰装运，并用经过验证的隔热包装和足够的制冷剂在整个运输过程中保持约 -78 °C 的温度。收到货后，应立即检查容器，并立即将小瓶转移到适当的储藏室。

DONOR

Donor age	30年
Ethnicity	非洲裔美国人

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。

Third-party agreements apply	Yes

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