HK-CRISPR-Nup188-mEGFP

300657

GENERAL INFORMATION

Description

HK-CRISPR-Nup188-mEGFP □一种转基因的 Hela Kyoto 细胞系。它利用 CRISPR/Cas9 技术在 Nup188 基因座上整合了 mEGFP（单体增强型绿色荧光蛋白）。Nup188 □一种参与核孔复合体的关键核蛋白，对细胞核和细胞质之间的分子运输至关重要。通过 mEGFP 标记可以实时观察 Nup188，有助于研究核孔复合体的动态和功能。这种细胞系对研究核转运和核孔复合体生物学的人员特别有用。它的荧光标记能在各种条件下观察 Nup188，包括药物治疗和基因修饰。其应用包括高内涵筛选、活细胞成像和其他基于荧光的技术，为了解核胞质转运和核包膜完整性提供了宝贵的信息。

Tissue	宫颈内口
Disease	腺癌
Metastatic site	不适用（HeLa京都衍生物；原发肿瘤部位为宫颈管）

Applications

核孔复合体（NPC）生物学；核-细胞质转运；Nup188的动力学与功能；核膜的活细胞荧光成像；高通量筛选； CRISPR敲入验证研究；核转运抑制剂评估

CLASSIFICATION

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

GMO status details

GMO-S1: This HeLa Kyoto line contains a CRISPR knock-in of mEGFP at the Nup188 locus, enabling visualization of nuclear pore scaffold 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细胞
Cell type	上皮细胞

IDENTIFIERS

Citation

HK-CRISPR-Nup188-mEGFP（Cytion 目录号 300657）

NCBI TaxID	9606
Cellosaurus	Not assigned (HK-CRISPR-Nup188-mEGFP is a CRISPR-modified HeLa Kyoto derivative; parental HeLa Kyoto CVCL_1922)
Depositor	艾伦伯格实验室（EMBL）

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Banking information
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EXPRESSION AND SUSCEPTIBILITY

Protein expression

Nup188□mEGFP-□□

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

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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	30□
Ethnicity	□□□□□□

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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。

Third-party agreements apply	Yes

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