HT55

305018

GENERAL INFORMATION

Description

HT55 □一种从一名 54 岁白人女性的原发性直肠肿瘤中建立的人直肠腺癌细胞系。该细胞系呈粘附性单层生长，具有上皮样形态。 HT55 携带 APC（结肠腺瘤性息肉病）抑癌基因中的多个杂合性和纯合性功能缺失突变，包括 p.Gln1131Ter、p.Gln1303Ter、p.Arg1463Ser、 p.Asn581Tyr 和 p.Lys241Ter（均为杂合突变），以及一个纯合的 p.Arg213Leu 替换突变。 这种突变谱使HT55成为APC驱动的结直肠癌发生生物学相关模型，反映了驱动大多数人类结直肠癌的经典 WNT通路失调。
HT55在结直肠癌研究中被广泛用于WNT/β-catenin信号传导、APC肿瘤抑制功能、药物敏感性和耐药性的研究，以及针对 WNT通路组分的靶向药物的临床前评估。 该细胞系适用于体外药理学检测和免疫缺陷小鼠模型中的异种移植研究，为机制和转化性结直肠癌研究提供了一个附着性良好、易于操作的体外平台。 由于存在多种APC截短突变，HT55代表了通常由APC功能丧失驱动的微卫星稳定、染色体不稳定的结直肠癌亚型。

Tissue	直肠
Disease	腺癌

Applications

结直肠癌研究；WNT/APC通路研究；药物敏感性与耐药性检测；肿瘤学临床前研究；异种移植模型；靶向治疗评估

Synonyms

- HT55

CLASSIFICATION

Organism	Human
Sex	Female
Growth properties	Adherent
Biosafety level	1

CHARACTERISTICS

Morphology	上皮样
Cell type	上皮细胞
Doubling time	28 小时

IDENTIFIERS

Citation

HT55（Cytion 产品编号 305018）

NCBI TaxID	9606
Cellosaurus	CVCL_1294

EXPRESSION AND SUSCEPTIBILITY

Mutational profile

突变：p.Gln1131Ter，杂合子；突变：p.Gln1303Ter，杂合子；突变：p.Arg1463Ser，杂合子；突变：p.Asn581Tyr，杂合子；突变：p.Lys241Ter，杂合子；突变：p.Arg213Leu，纯合子

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HANDLING AND CULTURE

Culture medium

EMEM□MEM Eagle□□w□2 mM L-□□□□□w□2.2 g/L NaHCO3□w□EBSS□Cytion □□□□ 820100a□□

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□□□□□□□□□□□□□□□□□□□□□□300×g□□3□□□ □□

Split ratio	1 □ 5
Seeding density	1□3×10⁴□□□/□□□□
Fluid renewal	□ 2 □ 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

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

Storage conditions

□□□□□□□□□□□□□□□□□□□□□□□□□□□ -150 □ -196 ℃□□-80 °C□□□□□□□□□□□□□□□□□□□

Shipping conditions

□□□ -78 °C □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□

DONOR

Donor age	54 □
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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