# HCC1954

305268

## GENERAL INFORMATION

### Description

HCC1954 □胞系来源于人类成年乳腺癌患者的原发性导管癌。该 □胞系被广泛用于乳腺癌研究，特别是用于研究 HER2 阳性（HER2+）和三阴性乳腺癌的遗传和分子特征。HCC1954 □胞表达 HER2，并具有 PIK3CA 基因突变，因此是研究癌症进展和靶向疗法开发过程中信号通路的重要模型。

HCC1954 □胞呈现上皮形态，在体外和体内均具有侵袭性生长特性。它们表达与侵袭性乳腺癌表型相关的标记，包括 HER2/neu，但不表达雌激素受体（ER）和孕酮受体（PR），因此被归类为三阴性乳腺癌 □胞。这种 □胞系被广泛用于评估曲妥珠单抗等 HER2 靶向疗法以及新型 PI3K 抑制剂的疗效和作用机制。此外，HCC1954 □胞还被用于确定耐药性生物标志物和探索联合治疗策略以提高治疗效果的研究中。 HCC1954 □胞系在了解侵袭性乳腺癌的生物学特性和开发有效治疗方法方面的相关性，凸显了 HCC1954 □胞系在肿瘤研究中的重要意义。

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|---|---|
| **Tissue** | 乳房 |
| **Disease** | 癌症 |

### Synonyms

- HCC-1954
- Hamon Cancer Center 1954

## CLASSIFICATION

| | |
|---|---|
| **Organism** | Human |
| **Sex** | Female |
| **Growth properties** | Adherent |
| **Biosafety level** | 1 |

## CHARACTERISTICS

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|---|---|
| **Morphology** | 上皮□胞 |

## IDENTIFIERS

### Citation

HCC1954（Cytion 目录编号 305268）

| | |
|---|---|
| **NCBI TaxID** | 9606 |
| **Cellosaurus** | CVCL_1259 |

## EXPRESSION AND SUSCEPTIBILITY

### Receptors expressed

雌激素受体-，孕激素受体-

### Protein expression

上皮糖蛋白 2 (EGP2)，□胞角蛋白 19

### Oncogenes

Her2/neu+（过表达）

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**Mutational profile**

□□□PIK3CA□p.His1047Arg (c.3140A>G)□□□□TP53□p.Tyr163Cys (c.488A>G)□□□□□□cltc + vmp1 = cltc-vmp1

## HANDLING AND CULTURE

**Culture medium**

RPMI 1640□w□2.0 mM □□□□□□□w□2.0 g/L NaHCO3□Cytion □□□□ 820700a□□

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|---|---|
| **Incubation atmosphere** | 37°C, 5%CO2, □□□□□ |

**Supplements**

□ 10% FBS □□□□□□□□ 2.5 □/□□□□□10 □□□ HEPES □ 1 □□□□□□□

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|---|---|
| **Dissociation reagent** | Accutase |

**Subculturing**

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

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| **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

**Sterility**

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

**Storage conditions**

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

**Shipping conditions**

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## DONOR

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|---|---|
| **Donor age** | 61 □ |
| **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。

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|---|---|
| **Material Transfer Agreement required** | Yes |

## PRODUCT DETAILS

### Composition table