

Product sheet

HCC1954 | 305268

General Information

Description	HCC1954 is a human colorectal adenocarcinoma cell line. It was established in 1954 from a 61-year-old male patient with a primary tumor in the sigmoid colon. The cell line is characterized by its ability to grow in vitro and in vivo. It is a well-established model for studying colorectal cancer biology and drug response.
Organism	Human
Tissue	Colorectal adenocarcinoma
Disease	Colorectal adenocarcinoma
Synonyms	HCC-1954, HCC1954, HCC1954

Cell Culture

Age	61 years
Gender	Male
Ethnicity	White
Morphology	Epithelial
Growth properties	Adherent

References and Safety

Citation	HCC1954 (ATCC CCL-221) Cytion 305268
Biosafety level	1
NCBI_TaxID	9606
CellSaurusAccession	CVCL_1259

Additional Information

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Receptors expressed EGFR -, HER2 -, IGF1R -

Protein expression EGFR2 (EGP2), HER2/NEU19

Oncogenes Her2/neu+ (HER2/NEU)

Mutational profile PIK3CA, p.His1047Arg (c.3140A>G); TP53, p.Tyr163Cys (c.488A>G); CLTC + VMP1 = CLTC-VMP1

Media

Culture Medium RPMI 1640, w: 2.0 mM L-glutamine, w: 2.0 g/L NaHCO3 (Cytion 820700a)

Supplements 10% FBS, 2.5 µg/ml insulin, 10 µg/ml HEPES 1 µg/ml selenium

Dissociation Reagent Trypsin

Subculturing Seed cells into 25 cm² flasks in RPMI 1640 + 10% FBS. Split ratio 1:3-5. Seed cells into 96 well plates in RPMI 1640 + 10% FBS. Seed cells into 384 well plates in RPMI 1640 + 10% FBS.

Fluid renewal 2-3 times per week

Freeze medium RPMI 1640 + 10% FBS + 10% DMSO (Cytion FBS) + 10% DMSO (Cytion DMSO) + 10% FBS + 10% DMSO (Cytion FBS) + 10% DMSO (Cytion DMSO)

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Thawing and Culturing Cells

1. Thaw the cells rapidly in a water bath at 37°C. Do not allow the cells to reach room temperature. After thawing, centrifuge at 300 x g for 3 minutes. Remove the supernatant and resuspend the cells in 10 ml of pre-warmed complete medium. Seed the cells into a T25 flask.
2. Incubate the cells in a humidified incubator at 37°C with 5% CO₂. Monitor the cell density and passage the cells when they reach 70-80% confluency.
3. For long-term storage, harvest the cells and resuspend them in 1 ml of freezing medium. Aliquot into 0.5 ml cryovials and store at -150°C.
4. Thaw the cells rapidly in a water bath at 37°C. Do not allow the cells to reach room temperature. After thawing, centrifuge at 300 x g for 3 minutes. Remove the supernatant and resuspend the cells in 10 ml of pre-warmed complete medium. Seed the cells into a T25 flask.
5. Incubate the cells in a humidified incubator at 37°C with 5% CO₂. Monitor the cell density and passage the cells when they reach 70-80% confluency.
6. For long-term storage, harvest the cells and resuspend them in 1 ml of freezing medium. Aliquot into 0.5 ml cryovials and store at -150°C.
7. Thaw the cells rapidly in a water bath at 37°C. Do not allow the cells to reach room temperature. After thawing, centrifuge at 300 x g for 3 minutes. Remove the supernatant and resuspend the cells in 10 ml of pre-warmed complete medium. Seed the cells into a T25 flask.
8. Incubate the cells in a humidified incubator at 37°C with 5% CO₂. Monitor the cell density and passage the cells when they reach 70-80% confluency.

Incubation Atmosphere 37°C, 5% CO₂, humidified

Flask Coating None

Freezing Procedure Harvest cells and resuspend in freezing medium. Aliquot into 0.5 ml cryovials and store at -78°C.

Shipping Conditions Store at -78°C.

Storage Conditions Store at -150°C for up to 196 months.

Genotype / Phenotype / HLA

Sterility The cells are free of mycoplasmas and PCR detectable viruses.