

Product sheet

BT-474 | 300131

BT-474

Description BT-474 is a cell line derived from a 60-year-old female patient with breast cancer. It is a highly tumorigenic cell line that grows in suspension culture. BT-474 cells are characterized by their ability to form mammospheres in non-adherent conditions.

Organism Human

Tissue Breast, Mammary gland

Disease Breast cancer

Metastatic site Breast

Synonyms Bt-474, BT474

Characteristics

Age 60 years

Gender Female

Ethnicity Caucasian

Morphology Epithelial cells

Growth properties Cells grow in suspension culture, forming mammospheres. They are highly tumorigenic and can be maintained in non-adherent conditions.

References

Citation BT-474 (Cytion 300131)

Biosafety level 1

NCBI_TaxID 9606

CellosaurusAccession CVCL_0179

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Cell Line Characteristics

Receptors expressed	HER-2/NEU+, ER+, PR+
Isoenzymes	G6PD, B, PGM3, 1, PGM1, 1, ES-D, 1, Me-2, 0, AK-1, 1, GLO-1, 1, 0.0426
Tumorigenic	Yes, in nude mice
Virus susceptibility	Yes, to RIIII-MuMTV
MSI-status	Stable (MSS)
Mutational profile	Wild-type TP53
Karyotype	46, XX, t(11q23) = 55, del(5p) = 50, 11q23, 58 - 59, 100, 3

Culture Conditions

Culture Medium	DMEM:Ham's F12 (1:1), w: 3.1 g/L insulin , w: 2.5 mM L- tryptophan , w: 15 mM HEPES, w: 0.5 mM beta-mercaptoethanol , w: 1.2 g/L NaHCO3 820400a)
Supplements	10% FBS, 10 ng/ml hydrocortisone
Doubling time	60 - 80 hours
Subculturing	Cells are detached using trypsin and EDTA, washed with PBS, and resuspended in T25 flasks with 3-5 ml PBS.
Seeding density	2 x 10 ⁴ cells per flask
Fluid renewal	2-3 times per week
Post-Thaw Recovery	100% recovery after 48 hours, 90% after 72 hours

Freeze medium ~~DMEM:Ham's F12 (1:1), w: 3.1 g/L insulin, w: 2.5 mM L-tryptophan, w: 15 mM HEPES, w: 0.5 mM beta-mercaptoethanol, w: 1.2 g/L NaHCO3 820400a) + 10% FBS + 10% 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. Centrifuge at 300 x g for 3 minutes. Resuspend the cells in 15 ml of complete medium. Seed the cells into 8 wells of a 96-well plate. Incubate at 37°C, 5% CO₂ for 24 hours. Harvest the cells for PCR analysis.
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Incubation Atmosphere 37°C, 5% CO₂, humidified air

Flask Coating None

Freezing Procedure Harvest cells into RNeasy lysis buffer. Store at -80°C.

Shipping Conditions Store at -80°C.

Storage Conditions Store at -150°C for 196 weeks.

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Sterility The cells are provided in a sterile, single-use format. No PCR inhibitors are present.

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HLA

A*: '01:01:01, '29:02:01

B*: 07:02:01, 44:03:01

C*: 07:02:01, 16:01:01

DRB1*: 04:01, 15:01

DQA1*: '01:02:01, '03:03:01

DQB1*: 06:02:01

DPB1*: '04:01:01G, '05:01:01G

E: '01:01:01, '01:03:02