

Product sheet

JIMT-1 | 305433

General Information

Description JIMT-1 is a human breast cancer cell line that is highly sensitive to trastuzumab (anti-HER2). It is derived from a primary tumor and is characterized by its high proliferation rate and ability to form xenografts in immunodeficient mice. The cell line is maintained in DMEM/F12 medium supplemented with insulin, transferrin, selenium, and hydrocortisone. It is a HER2-positive cell line, making it a valuable model for studying HER2-targeted therapies in breast cancer.

Organism Human

Tissue Breast

Disease Breast cancer

Metastatic site Liver, lung, brain

Synonyms JIMT1, JIMT

Characteristics

Age 62 years

Gender Female

Ethnicity Caucasian

Morphology Epithelial

Growth properties Adherent, high proliferation rate

References and Safety

Citation JIMT-1 (ATCC CRL-2258) | ATCC 305433

Biosafety level 1

NCBI_TaxID 9606

CellSaurusAccession CVCL_2077

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Cell Line

Oncogenes HER-2 (HER-2) ER- PR- AR-

Mutational profile PIK3CA, p.Cys420Arg (c.1258T>C) TP53 p.Arg248Trp (c.742C>T)

Cell Line

Culture Medium DMEM 4.5 g/l 4 3.7 g/l NaHCO3 1.0

Supplements 10% FBS

Dissociation Reagent

Subculturing PBS

Seeding density 1 x 10⁴

Freeze medium (FBS) + 10% DMSO

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Thawing and Culturing Cells

1. Thaw the vial rapidly in a water bath at 37°C. Do not allow the cells to reach room temperature.
2. Centrifuge the cells at 300 × g for 3 minutes at 4°C. Remove the supernatant and resuspend the cells in 10 ml of complete medium.
3. Seed the cells into a T75 flask containing 50 ml of complete medium. The cell density should be approximately 1 × 10⁶ cells per flask.
4. Incubate the cells in a humidified atmosphere of 5% CO₂ at 37°C. The medium should be changed every 2-3 days.
5. When the cells reach confluence, they should be passaged. The passage efficiency should be approximately 70%.
6. The cells should be maintained in complete medium. The medium should be changed every 2-3 days.
7. The cells should be passaged every 2-3 days. The passage efficiency should be approximately 70%.
8. The cells should be maintained in complete medium. The medium should be changed every 2-3 days.

Incubation Atmosphere

37°C, 5% CO₂

Flask Coating

None

Freezing Procedure

Cells should be frozen in a cryovial containing 1 ml of freezing medium. The freezing medium should be composed of complete medium supplemented with 10% fetal bovine serum (FBS) and 10% dimethyl sulfoxide (DMSO). The cells should be frozen at -80°C.

Shipping Conditions

Cells should be shipped at -80°C.

Storage Conditions

Cells should be stored at -150°C to -196°C.

Genotype / HLA

Sterility

The cells are tested for mycoplasma contamination using PCR. The cells are also tested for sterility using a sterility test kit.