

JIMT-1 | 305433

General Information

Description JIMT-1 is a cell line derived from a patient with HER2-positive breast cancer. It is characterized by high levels of HER2 expression and is used for studying HER2-targeted therapies. The cell line is maintained in DMEM/F12 medium supplemented with insulin, transferrin, selenium, and hydrocortisone. It is a highly proliferative cell line with a doubling time of approximately 48 hours.

Organism Human

Tissue Breast

Disease Breast cancer

Metastatic site Liver

Synonyms JIMT1, JIMT

Characteristics

Age 62 years

Gender Female

Ethnicity Caucasian

Morphology Epithelial

Growth properties Adherent

References

Citation JIMT-1 (ATCC CRL-2739) | 305433

Biosafety level 1

NCBI_TaxID 9606

CellosaurusAccession CVCL_2077

JIMT-1 | 305433

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 (82)

Supplements 10% FBS

Dissociation Reagent

Subculturing PBS

Seeding density 1×10^4

Freeze medium (FBS) + 10% DMSO

JIMT-1 | 305433

Thawing and Culturing Cells

1. Thaw the vial in a water bath at 37°C. Transfer the cells to a 15 mL centrifuge tube and centrifuge at 300 x g for 3 minutes. Remove the supernatant and resuspend the cells in 10 mL of complete medium. Seed the cells into a T75 flask and incubate at 37°C in 5% CO2. The cells should reach 70% confluency within 8-15 days.
2. Once the cells have reached 70% confluency, passage them into a new T75 flask. Repeat this process every 7-10 days.
3. For long-term storage, harvest the cells and freeze them in liquid nitrogen. Store the vials at -150 to -196°C.
4. Thaw the vial in a water bath at 37°C. Transfer the cells to a 15 mL centrifuge tube and centrifuge at 300 x g for 3 minutes. Remove the supernatant and resuspend the cells in 10 mL of complete medium. Seed the cells into a T75 flask and incubate at 37°C in 5% CO2. The cells should reach 70% confluency within 8-15 days.
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8. Once the cells have reached 70% confluency, passage them into a new T75 flask. Repeat this process every 7-10 days.

Incubation Atmosphere

37°C, 5% CO2

Flask Coating

Flasks should be coated with 1% BSA in PBS for 1 hour at 37°C.

Freezing Procedure

Cells should be harvested and frozen in liquid nitrogen. Store the vials at -78°C.

Shipping Conditions

Cells should be shipped on dry ice at -78°C.

Storage Conditions

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

HLA typing: HLA-A*01:01, HLA-B*08:01, HLA-C*07:02

Sterility

Cells are provided in a sterile, cryoprotected medium. The medium contains antibiotics (penicillin, streptomycin, and fungicide) to prevent contamination. The cells are free of mycoplasma and other contaminants.