

GIST-T1 | 305777

General information

Description	GIST-T1 is a cell line derived from a human gastrointestinal stromal tumor (GIST), which is a type of tumor that arises from the interstitial cells of Cajal (ICC) in the gastrointestinal tract. GIST-T1 is characterized by a mutation in the KIT gene (V570Y) and is used for research on GIST and its treatment. GIST-T1 cells are grown in DMEM/F12 medium supplemented with 10% fetal bovine serum (FBS) and 10% human platelet-derived growth factor (hPDGF). The cells are maintained in a humidified atmosphere of 5% CO₂ at 37°C. GIST-T1 cells are used for research on GIST and its treatment. The cells are used to study the effects of various drugs on GIST and to develop new treatments for GIST.
Organism	Human
Tissue	Gastrointestinal stromal tumor
Disease	Gastrointestinal stromal tumor
Metastatic site	Metastatic site

Synonyms GIST-T-1, GISTT1, T1

Cell characteristics

Age	47 years
Gender	Male
Ethnicity	Chinese
Cell type	Epithelial cells
Growth properties	Adherent

Cell culture conditions

Citation	GIST-T1 (Cytion 305777)
Biosafety level	1
NCBI_TaxID	9606

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CellosaurusAccession CVCL_4976

Cell line **Genotype**

Mutational profile **Genotype** KIT, p.Val560_Tyr578del (c.1679_1735del),

Cell line

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

Supplements **Glucose** **Glucose** 10% FBS

Dissociation Reagent **Glucose**

Doubling time 48 **Glucose**

Seeding density 1 4×10^4 **Glucose** **Glucose**

Fluid renewal 2 **Glucose** **Glucose**

Freeze medium **Glucose** **Glucose** **Glucose**, **Glucose** **Glucose** **Glucose** **Glucose** (FBS) + 10% DMSO **Glucose** **Glucose** **Glucose** **Glucose** **Glucose**, **Glucose**

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**Thawing and
Culturing Cells**

1. **Thawing:** Thaw the cells quickly in a water bath at 37°C. Transfer the cells to a pre-warmed medium.
2. **Seeding:** Seed the cells into a well of a 96-well plate. Add 100 µl of medium per well. Incubate at 37°C for 24 hours.
3. **Medium Change:** After 24 hours, remove the medium and replace it with fresh medium.
4. **Passaging:** When the cells reach confluence, passage them into a new well.
5. **Freezing:** For long-term storage, freeze the cells in a freezing medium and store at -150°C.
6. **Thawing:** Thaw the cells quickly in a water bath at 37°C. Transfer the cells to a pre-warmed medium.
7. **Seeding:** Seed the cells into a well of a 96-well plate. Add 100 µl of medium per well. Incubate at 37°C for 24 hours.
8. **Medium Change:** After 24 hours, remove the medium and replace it with fresh medium.

**Incubation
Atmosphere**

37°C, 5% CO₂, humidified

**Shipping
Conditions**

Cells are shipped in a dry ice container at -78°C.

**Storage
Conditions**

Cells are stored at -150°C for up to 196 weeks.

Applications

Sterility

Cells are tested for sterility using PCR and are found to be free of contamination.