

Product sheet

4T1 | 300300

4T1

**Description**

4T1 is a murine mammary epithelial cell line derived from a BALB/c mouse. It is a highly proliferative, non-tumorigenic cell line that is widely used in research on mammary gland biology and cancer. The cells are characterized by their ability to form mammary gland-like structures in culture and their sensitivity to various growth factors and hormones. 4T1 cells are commonly used to study the effects of different treatments on mammary cancer cells and to investigate the mechanisms of tumor growth and metastasis.

**Organism** Murine

**Tissue** Mammary gland

**Disease** Mammary cancer

**Applications** 4T1 cells are used in various applications, including studying the effects of different treatments on mammary cancer cells, investigating the mechanisms of tumor growth and metastasis, and testing the efficacy of new drugs and therapies.

**Synonyms** 4T1-A, 4T1.0, 4T1/WT

4T1

**Breed/Subspecies** BALB/cfC3H

**Gender** Female

**Morphology** Epithelial

**Growth properties** Adherent

4T1

**Citation** 4T1 (ATCC CCL-247) | Cytion 300300

**Biosafety level** 1

**NCBI\_TaxID** 10090

**CellosaurusAccession** CVCL\_0125

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## Cell Line

**Tumorigenic** Yes, BALB/c.

## Characteristics

**Culture Medium** RPMI 1640, w: 2.0 mM  $\beta$ -mercaptoethanol, w: 2.0 g/L NaHCO<sub>3</sub> (Cytion 820700a)

**Supplements** 10% FBS

**Dissociation Reagent** Trypsin

**Subculturing** Cells are cultured in RPMI 1640 medium supplemented with 10% FBS. Cells are passaged by trypsinization into T25 flasks, 3-5 x 10<sup>6</sup> cells per flask. Cells are passaged into 3 flasks.

**Freeze medium** RPMI 1640 medium supplemented with 10% FBS + 10% DMSO

## Thawing and Culturing Cells

1. Thaw cells rapidly in a 37°C water bath, then transfer to a 15 mL centrifuge tube containing 10 mL of pre-warmed RPMI 1640 medium supplemented with 10% FBS.
2. Centrifuge cells at 300 x g for 3 minutes, then resuspend in 10 mL of pre-warmed RPMI 1640 medium supplemented with 10% FBS.
3. Seed cells into a T25 flask containing 10 mL of pre-warmed RPMI 1640 medium supplemented with 10% FBS.
4. Incubate cells in a humidified 5% CO<sub>2</sub> incubator at 37°C.
5. Monitor cell growth and confluency. Once cells reach 70-80% confluency, passage them into a new T25 flask.
6. Harvest cells by trypsinization and centrifugation at 300 x g for 3 minutes.
7. Resuspend cells in 10 mL of pre-warmed RPMI 1640 medium supplemented with 10% FBS.
8. Seed cells into a T25 flask containing 10 mL of pre-warmed RPMI 1640 medium supplemented with 10% FBS.

**Incubation Atmosphere** 37°C, 5% CO<sub>2</sub>

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**Flask Coating**

**Freezing Procedure**

**Shipping Conditions**

**Storage Conditions**

/ / HLA

**Sterility**