

4T1 | 300300

General information

Description	4T1 is a mammary epithelial cell line derived from a spontaneous mammary adenocarcinoma in a female BALB/c mouse. It is a highly invasive, metastatic cell line that is widely used in cancer research. 4T1 cells are characterized by their ability to form large, solid tumors in mice, which are highly metastatic and often fatal. The cell line is maintained in DMEM/F12 medium supplemented with 10% fetal bovine serum (FBS) and 1% penicillin-streptomycin. 4T1 cells are highly proliferative and have a doubling time of approximately 24 hours. They are also highly invasive and can migrate through the basement membrane and into the bloodstream. 4T1 cells are highly metastatic and can form tumors in various organs, including the lungs, liver, and bone. 4T1 cells are highly resistant to chemotherapy and radiation therapy. 4T1 cells are highly tumorigenic and can form tumors in mice. 4T1 cells are highly metastatic and can form tumors in various organs, including the lungs, liver, and bone. 4T1 cells are highly resistant to chemotherapy and radiation therapy. 4T1 cells are highly tumorigenic and can form tumors in mice.
Organism	Mouse
Tissue	Epithelial, Mammary gland
Disease	Adenocarcinoma
Applications	4T1 cells are used in a variety of applications, including: - Investigating the mechanisms of cancer progression and metastasis. - Testing new cancer therapies. - Studying the effects of hormones on cancer growth. - Investigating the role of the immune system in cancer.
Synonyms	4T1-A, 4T1.0, 4T1/WT

Characteristics

Breed/Subspecies	BALB/cfC3H
Gender	Female
Morphology	Epithelial
Growth properties	Highly proliferative

Identification and documentation

Citation	4T1 (ATCC CCL-226) Cytion 300300
Biosafety level	1
NCBI_TaxID	10090
CellosaurusAccession	CVCL_0125

4T1 | 300300

Cell Line: 4T1-300300

Tumorigenic	Yes, BALB/c.
-------------	--------------

Cell Line

Culture Medium	RPMI 1640, w: 2.0 mM NaH_2PO_4 , w: 2.0 g/L NaHCO_3 (Cytion 820700a)
----------------	---

Supplements	10% FBS
-------------	---------

Dissociation Reagent	Trypsin
----------------------	---------

Subculturing	Cells are grown in 25 cm ² flasks in RPMI 1640 medium supplemented with 10% FBS. Cells are passaged when they reach 80-90% confluency. Cells are trypsinized and resuspended in PBS. Cells are seeded into new flasks at a density of 1 x 10 ⁵ cells per flask.
--------------	---

Freeze medium	Cells are frozen in RPMI 1640 medium supplemented with 10% FBS and 10% DMSO. Cells are seeded into new flasks at a density of 1 x 10 ⁵ cells per flask.
---------------	--

Thawing and Culturing Cells	1. Cells are thawed in a 37°C water bath. 2. Cells are centrifuged at 300 x g for 5 minutes. 3. Cells are resuspended in RPMI 1640 medium supplemented with 10% FBS. 4. Cells are seeded into new flasks at a density of 1 x 10⁵ cells per flask. 5. Cells are grown in 25 cm² flasks in RPMI 1640 medium supplemented with 10% FBS. 6. Cells are passaged when they reach 80-90% confluency. 7. Cells are trypsinized and resuspended in PBS. 8. Cells are seeded into new flasks at a density of 1 x 10⁵ cells per flask.
-----------------------------	--

Incubation Atmosphere	37°C, 5% CO_2 , humidified
-----------------------	-------------------------------------

4T1 | 300300

Flask Coating

Fluoropolymer

Freezing Procedure

For freezing, the cells should be seeded into the flask and allowed to attach. The medium should be removed and the cells washed with PBS. The cells should then be trypsinized and resuspended in freezing medium. The cells should be frozen at -80°C.

Shipping Conditions

For shipping, the cells should be seeded into the flask and allowed to attach. The medium should be removed and the cells washed with PBS. The cells should then be trypsinized and resuspended in shipping medium. The cells should be shipped at -78°C.

Storage Conditions

For storage, the cells should be seeded into the flask and allowed to attach. The medium should be removed and the cells washed with PBS. The cells should then be trypsinized and resuspended in storage medium. The cells should be stored at -150 to 196 °C.

For storage, the cells should be seeded into the flask and allowed to attach. The medium should be removed and the cells washed with PBS. The cells should then be trypsinized and resuspended in storage medium. The cells should be stored at -150 to 196 °C.

Sterility

The cells are supplied as a suspension in a sterile medium. The cells are PCR negative.

The cells are free of mycoplasmas, endotoxins, and other contaminants. The cells are free of viruses and other pathogens.