

Resource Summary Report

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4T1

RRID:CVCL_0125

Type: Cell Line

Proper Citation

Ubigen Cat# YC-B004, RRID:CVCL_0125

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_0125

Proper Citation: Ubigen Cat# YC-B004, RRID:CVCL_0125

Description: Cell line 4T1 is a Cancer cell line with a species of origin Mus musculus (Mouse)

Sex: Female

Disease: Malignant neoplasms of the mouse mammary gland

Defining Citation: [PMID:10411109](#), [PMID:26857856](#), [PMID:27177471](#), [PMID:31220119](#), [PMID:37712227](#)

Comments: Characteristics: Widely used model in cancer research due to its high similarity to human breast cancer. The tumor growth and metastatic spread of 4T1 cells closely mimic the behavior of human breast cancer. The 4T1 cell line is considered an animal model for stage IV human breast cancer, as it is able to spontaneously metastasize in both post-operative and non-surgical models (CLS=300300)., Characteristics: Metastatic.

Category: Cancer cell line

Organism: Mus musculus (Mouse)

Name: 4T1

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

Cross References: BTO:BTO_0004311, CLO:CLO_0001401, EFO:EFO_0002037, MCCL:MCC:0000017, AddexBio:C0006004/13, ATCC:CRL-2539, BCRJ:0022, BioGRID_ORCS_Cell_line:1260, BioSample:SAMN11397647, CCRID:3101MOUSCSP5056, CCRID:3101MOUTCM32, CCRID:4201MOU-CCTCC00294, CCRID:6101MOU-CERC000107, CCTCC:GDC0294, ChEMBL-

Cells:CHEMBL3307995, ChEMBL-Targets:CHEMBL612589, CLS:300300, GEO:GSM1529765, GEO:GSM1529766, GEO:GSM1529767, GEO:GSM1847461, GEO:GSM1847462, KCB:KCB 200967YJ, Lonza:481, NCBI_Iran:C604, PRIDE:PXD013948, PRIDE:PXD016112, PRIDE:PXD021413, PRIDE:PXD024762, PRIDE:PXD027822, PubChem_Cell_line:CVCL_0125, Ubigene:YC-B004, Wikidata:Q42802273

ID: CVCL_0125

Vendor: Ubigene

Catalog Number: YC-B004

Hierarchy: cvcl_w343

Record Creation Time: 20250130T070040+0000

Record Last Update: 20260830T001151+0000

Ratings and Alerts

No rating or validation information has been found for 4T1.

No alerts have been found for 4T1.

Data and Source Information

Source: [Cellosaurus](#)

Usage and Citation Metrics

We found 442 mentions in open access literature.

Listed below are recent publications. The full list is available at [dkNET](#) .

Fu Z, et al. (2026) Photo-Empowered Macrophage-Based Drug Delivery System Overcomes Motility Suppression and Significantly Enhances Deep Tumor Drug Delivery. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 13(5), e15349.

Kou X, et al. (2026) Tumor-activated dual metabolic nanomodulator turns over tolerogenic tumor control and unleashes systemic immune responses. Journal of nanobiotechnology, 24(1).

Feng Q, et al. (2026) Targeting severe acidity for tumor-activatable Interleukin-2 therapy. Cell reports. Medicine, 7(1), 102572.

Niravath P, et al. (2026) A Phase II Study of Docetaxel and Pembrolizumab plus Interleukin 12 Gene Therapy in Nonmetastatic, Anthracycline-Refractory Triple-Negative Breast Cancer (INTEGRAL). Clinical cancer research : an official journal of the American Association for Cancer Research, 32(9), 1697.

Deng X, et al. (2026) Self-Assembled Carrier-Free Nanomedicines Potentiate Chemo-Photothermal Immunotherapy by Overcoming Prostaglandin E2-Mediated Immunosuppression. *Small* (Weinheim an der Bergstrasse, Germany), 22(20), e12540.

Lei F, et al. (2026) Therapeutic Effect of Gemcitabine Combined With Angelica Polysaccharide on Triple Negative Breast Cancer in Mice. *Integrative cancer therapies*, 25, 15347354251414897.

Rabinowitz Z, et al. (2026) Erasable FAP Targeted Spray-On Probe for Fluorescence-Guided Surgery. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 13(32), e23986.

Monteiro AC, et al. (2026) OPG-Producing B Cells and RANKL-Expressing T Cells Define Immune Signatures Predictive of Bone Metastases in Breast Cancer. *Cancer research communications*, 6(1), 85.

Zhao Y, et al. (2026) Magnetic fluorescent carbon dots synthesized via one-pot approach for tumor photothermal therapy. *iScience*, 29(1), 114366.

Yamauchi T, et al. (2026) Valine availability controls oncogenic cell-cycle progression through translation of D-type cyclins. *Biochemical pharmacology*, 246, 117706.

Georgievski A, et al. (2026) Valrubicin-loaded immunoliposomes targeting antigens on immunosuppressive cells to circumvent resistance to cancer immunotherapy. *Cell reports. Medicine*, 7(3), 102632.

Tian C, et al. (2026) Dual-Physical-Field Nanocatalysis: Injectable Hydrogel Enables Piezo-Photothermal Synergy for Breast Cancer Therapy. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 13(37), e22447.

Xu X, et al. (2026) Ultrasound-triggered carrier-free nanoprodugs activate cGAS-STING pathway to enhance tumor-targeting chemo-immunotherapy. *Materials today. Bio*, 37, 102858.

Sun S, et al. (2026) Ammonia Detoxification Inhibits Liver Metastasis by Reshaping Hepatic Microenvironment. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 13(33), e21098.

Zhu XR, et al. (2026) PFDN5 synergizes with anti-PD1 therapy to promote triple-negative breast cancer cell death through JAK2/STAT3/c-Myc signaling axis. *Journal of translational medicine*, 24(1).

Wang X, et al. (2026) Targeting KDM3B Elicits Anti-tumor Immunity by Alleviating SHP1-mediated STING Suppression in Triple-Negative Breast Cancer. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), e75846.

Zhou T, et al. (2026) Pharmacologic Modulation of ARID3A with Rimegepant Reactivates Type I Interferon Signaling and Sensitizes Triple-Negative Breast Cancer to PD-1 Blockade. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 13(40), e21541.

Liu L, et al. (2026) Potentiating Paclitaxel with its Homologous Nanovesicles: A Synergistic Strategy for Triple-Negative Breast Cancer Therapy. *ACS applied materials & interfaces*,

18(24), 33659.

Xia D, et al. (2026) Ultrasound-Recharged Sub-Nanometer Palladium Catalysts for on-Demand and Self-Terminating Bioorthogonal Prodrug Activation in Cancer Therapy. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), e76338.

Chen H, et al. (2026) CCL3 and IL-7 Synergistically Enhance CAR-T Efficacy in Solid Tumors. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), e75993.