

Product sheet

4T1-Luc | 305663

4T1-Luc

Description 4T1-Luc is a mouse mammary epithelial cell line that expresses luciferase (Luc) under the control of the 4T1 promoter. This cell line is used for studying breast cancer progression and metastasis. It is characterized by its ability to form mammary tumors in syngeneic BALB/c mice. The cells are immortalized and maintain the ability to form mammary tumors in vivo. The luciferase gene is integrated into the genome, allowing for non-invasive bioluminescence imaging (BLI) to monitor tumor growth and metastasis in real-time. 4T1-Luc cells are highly tumorigenic and are used as a model for studying breast cancer biology and evaluating therapeutic interventions.

Organism Mouse

Tissue Mammary gland

Disease Breast cancer

Characteristics

Breed/Subspecies BALB/cfC3H

Gender Male

Morphology Epithelial cells

Growth properties Adherent

References

Citation 4T1-Luc (ATCC CRL-2539) Cytion: 305663

Biosafety level 1

NCBI_TaxID 10090

CellSaurusAccession CVCL_J239

Antigen expression

Antigen expression CD44, CD24, CD61, CD133, CD151, CD166, CD167, CD168, CD169, CD170, CD171, CD172, CD173, CD174, CD175, CD176, CD177, CD178, CD179, CD180, CD181, CD182, CD183, CD184, CD185, CD186, CD187, CD188, CD189, CD190, CD191, CD192, CD193, CD194, CD195, CD196, CD197, CD198, CD199, CD200, CD201, CD202, CD203, CD204, CD205, CD206, CD207, CD208, CD209, CD210, CD211, CD212, CD213, CD214, CD215, CD216, CD217, CD218, CD219, CD220, CD221, CD222, CD223, CD224, CD225, CD226, CD227, CD228, CD229, CD230, CD231, CD232, CD233, CD234, CD235, CD236, CD237, CD238, CD239, CD240, CD241, CD242, CD243, CD244, CD245, CD246, CD247, CD248, CD249, CD250, CD251, CD252, CD253, CD254, CD255, CD256, CD257, CD258, CD259, CD260, CD261, CD262, CD263, CD264, CD265, CD266, CD267, CD268, CD269, CD270, CD271, CD272, CD273, CD274, CD275, CD276, CD277, CD278, CD279, CD280, CD281, CD282, CD283, CD284, CD285, CD286, CD287, CD288, CD289, CD290, CD291, CD292, CD293, CD294, CD295, CD296, CD297, CD298, CD299, CD300, 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Tumorigenic BALB/c.

MSI-status

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Culture Medium RPMI 1640 2.0 2.0 2.0 NaHCO3 (820700a)

Supplements 10% FBS

Dissociation Reagent

Subculturing PBS

Seeding density 1 x 10⁴ cells

Fluid renewal 2-3 times

Freeze medium + 10% DMSO

Thawing and Culturing Cells

1. Thaw cells in a 37°C water bath.
2. Centrifuge cells at 300 x g for 5 minutes.
3. Resuspend cells in 1 mL of culture medium.
4. Seed cells into a 24-well plate at a density of 1 x 10⁴ cells per well.
5. Incubate cells in a humidified CO₂ incubator at 37°C.
6. Monitor cell growth and morphology.
7. Harvest cells for analysis.

