Resource Summary Report

Generated by RRID on Sep 8, 2026

MC3T3

RRID:CVCL_0D74
Type: Cell Line

Proper Citation

RRID:CVCL_0D74

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_0D74

Proper Citation: RRID:CVCL_0D74

Description: Cell line MC3T3 is a Spontaneously immortalized cell line with a species of origin Mus musculus (Mouse)

Sex: Sex unspecified

Category: Spontaneously immortalized cell line

Organism: Mus musculus (Mouse)

Name: MC3T3

Synonyms: MC-3T3, MC3T3-E

Cross References: BTO:BTO_0005485, Lonza:1345, Wikidata:Q6714803

ID: CVCL_0D74

Record Creation Time: 20220427T220749+0000

Record Last Update: 20260905T181111+0000

Ratings and Alerts

No rating or validation information has been found for MC3T3.

No alerts have been found for MC3T3.

Data and Source Information

Source: Cellosaurus

Usage and Citation Metrics

We found 271 mentions in open access literature.

Listed below are recent publications. The full list is available at RRID .

Mertz EL, et al. (2023) Bone Formation in 2D Culture of Primary Cells. JBMR plus, 7(1), e10701.

Jaramillo J, et al. (2023) Oxaloacetate enhances and accelerates regeneration in young mice by promoting proliferation and mineralization. Frontiers in cell and developmental biology, 11, 1117836.

Oppezzo A, et al. (2023) Fanca deficiency is associated with alterations in osteoclastogenesis that are rescued by TNF?. Cell & bioscience, 13(1), 115.

Wang Y, et al. (2023) Fabrication and characterization of photosensitive non-isocyanate polyurethane acrylate resin for 3D printing of customized biocompatible orthopedic surgical guides. International journal of bioprinting, 9(3), 684.

Arivalagan J, et al. (2023) Insights into the Structure and Function of TRIP-1, a Newly Identified Member in Calcified Tissues. Biomolecules, 13(3).

Chen J, et al. (2023) A bifunctional bortezomib-loaded porous nano-hydroxyapatite/alginate scaffold for simultaneous tumor inhibition and bone regeneration. Journal of nanobiotechnology, 21(1), 174.

Wang J, et al. (2023) Stabilization of Bio-Oss® particulates using photocurable hydrogel to enhance bone regeneration by regulating macrophage polarization. Frontiers in bioengineering and biotechnology, 11, 1183594.

Wu Y, et al. (2023) Multiscale design of stiffening and ROS scavenging hydrogels for the augmentation of mandibular bone regeneration. Bioactive materials, 20, 111.

Zhang P, et al. (2023) Vancomycin-loaded silk fibroin microspheres in an injectable hydrogel for chronic osteomyelitis therapy. Frontiers in bioengineering and biotechnology, 11, 1163933.

Sanesi L, et al. (2023) Time-dependent unloading effects on muscle and bone and involvement of FNDC5/irisin axis. NPJ microgravity, 9(1), 4.

Upson SJ, et al. (2023) Bond Strength and Adhesion Mechanisms of Novel Bone Adhesives. Bioengineering (Basel, Switzerland), 10(1).

Wang Y, et al. (2023) Tough, Injectable Calcium Phosphate Cement Based Composite Hydrogels to Promote Osteogenesis. Gels (Basel, Switzerland), 9(4).

Li K, et al. (2023) Suppression of osteosarcoma progression by engineered lymphocyte-derived proteomes. Genes & diseases, 10(4), 1641.

Hosseinpour S, et al. (2023) Mesoporous Core-Cone Silica Nanoparticles Can Deliver miRNA-26a to Macrophages to Exert Immunomodulatory Effects on Osteogenesis In Vitro. Nanomaterials (Basel, Switzerland), 13(11).

Scotto di Carlo F, et al. (2023) Profilin 1 deficiency drives mitotic defects and reduces genome stability. Communications biology, 6(1), 9.

Hambright WS, et al. (2023) The Senolytic Drug Fisetin Attenuates Bone Degeneration in the Zmpste24 -/- Progeria Mouse Model. Journal of osteoporosis, 2023, 5572754.

Zarghami V, et al. (2022) Improving bactericidal performance of implant composite coatings by synergism between Melittin and tetracycline. Journal of materials science. Materials in medicine, 33(6), 46.

Liu Y, et al. (2022) Bone mineral: A trojan horse for bone cancers. Efficient mitochondria targeted delivery and tumor eradication with nano hydroxyapatite containing doxorubicin. Materials today. Bio, 14, 100227.

Vrchovecká K, et al. (2022) Cytocompatibility and Bioactive Ion Release Profiles of Phosphoserine Bone Adhesive: Bridge from In Vitro to In Vivo. Biomedicines, 10(4).

Fan Y, et al. (2022) Klotho in Osx+-mesenchymal progenitors exerts pro-osteogenic and anti-inflammatory effects during mandibular alveolar bone formation and repair. Signal transduction and targeted therapy, 7(1), 155.