

Resource Summary Report

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ATDC-5

RRID:CVCL_3894

Type: Cell Line

Proper Citation

(ECACC Cat# 99072806, RRID:CVCL_3894)

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_3894

Proper Citation: (ECACC Cat# 99072806, RRID:CVCL_3894)

Sex: Male

Defining Citation: [PMID:2201423](#), [PMID:23192741](#)

Category: Cancer cell line

Name: ATDC-5

Synonyms: ATDC5

Cross References: BTO:BTO_0001929, CLO:CLO_0050536, ECACC:99072806, Lonza:227, RCB:RCB0565, Wikidata:Q54751118

ID: CVCL_3894

Vendor: ECACC

Catalog Number: 99072806

Record Creation Time: 20250131T193939+0000

Record Last Update: 20250131T194158+0000

Ratings and Alerts

No rating or validation information has been found for ATDC-5.

No alerts have been found for ATDC-5.

Data and Source Information

Source: [Cellosaurus](#)

Usage and Citation Metrics

We found 15 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Zhang M, et al. (2025) Downregulation of HSP47 triggers ER stress-mediated apoptosis of hypertrophic chondrocytes contributing to T-2 toxin-induced cartilage damage. Environmental pollution (Barking, Essex : 1987), 368, 125640.

Pazos-Pérez A, et al. (2024) The Hepatokine RBP4 Links Metabolic Diseases to Articular Inflammation. Antioxidants (Basel, Switzerland), 13(1).

Chen W, et al. (2024) Cbf β regulates Wnt/ β -catenin, Hippo/Yap, and TGF β signaling pathways in articular cartilage homeostasis and protects from ACLT surgery-induced osteoarthritis. bioRxiv : the preprint server for biology.

Kim D, et al. (2024) Gulp1 regulates chondrocyte growth arrest and differentiation via the TGF- β /SMAD2/3 pathway. FEBS letters, 598(8), 935.

Chen W, et al. (2024) Cbf β regulates Wnt/ β -catenin, Hippo/Yap, and Tgf β signaling pathways in articular cartilage homeostasis and protects from ACLT surgery-induced osteoarthritis. eLife, 13.

Kawaue H, et al. (2024) KIF22 regulates mitosis and proliferation of chondrocyte cells. iScience, 27(7), 110151.

Sheng R, et al. (2024) METTL3 regulates cartilage development and homeostasis by affecting Lats1 mRNA stability in an m6A-YTHDF2-dependent manner. Cell reports, 43(8), 114535.

Wang H, et al. (2024) Protocol for microindentation analysis of human cartilage and methacrylated gelatin hydrogels with varying stiffness in ATDC5 cell cultures. STAR protocols, 6(1), 103511.

Kong K, et al. (2023) Mechanical overloading leads to chondrocyte degeneration and senescence via Zmpste24-mediated nuclear membrane instability. iScience, 26(11), 108119.

Zhang F, et al. (2023) NFATc1 marks articular cartilage progenitors and negatively

determines articular chondrocyte differentiation. *eLife*, 12.

Franco-Trepat E, et al. (2022) Amitriptyline blocks innate immune responses mediated by toll-like receptor 4 and IL-1 receptor: Preclinical and clinical evidence in osteoarthritis and gout. *British journal of pharmacology*, 179(2), 270.

Takano M, et al. (2021) ANGPTL2 Promotes Inflammation via Integrin $\alpha 5 \beta 1$ in Chondrocytes. *Cartilage*, 13(2_suppl), 885S.

Chen P, et al. (2020) YAP1 regulates chondrogenic differentiation of ATDC5 promoted by temporary TNF- α stimulation through AMPK signaling pathway. *Molecular and cellular biochemistry*, 474(1-2), 209.

Ishida M, et al. (2018) Serpina3n, Dominantly Expressed in Female Osteoblasts, Suppresses the Phenotypes of Differentiated Osteoblasts in Mice. *Endocrinology*, 159(11), 3775.

Diaz-Romero J, et al. (2017) S100B β /A1 CELISA: A Novel Potency Assay and Screening Tool for Redifferentiation Stimuli of Human Articular Chondrocytes. *Journal of cellular physiology*, 232(6), 1559.