Resource Summary Report

Generated by RRID on Aug 30, 2026

MCF-12A

RRID:CVCL_3744
Type: Cell Line

Proper Citation

ATCC Cat# CRL-10782, RRID:CVCL_3744

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_3744

Proper Citation: ATCC Cat# CRL-10782, RRID:CVCL_3744

Description: Cell line MCF-12A is a Spontaneously immortalized cell line with a species of origin Homo sapiens (Human)

Sex: Female

Defining Citation: PMID:17157791, PMID:18516279, PMID:24094812, PMID:24162158, PMID:24176112, PMID:25960936, PMID:28287265

Comments: Population: Caucasian., Part of: JWGray breast cancer cell line panel., Part of: ICBP43 breast cancer cell line panel., Part of: Cancer Dependency Map project (DepMap) (includes Cancer Cell Line Encyclopedia - CCLE)., Group: Patented cell line.

Category: Spontaneously immortalized cell line

Organism: Homo sapiens (Human)

Name: MCF-12A

Synonyms: MCF12A, Michigan Cancer Foundation-12A

Cross References: BTO:BTO_0002544, CLO:CLO_0007603, CLO:CLO_0037180, EFO:EFO_0001202, ArrayExpress:E-TABM-157, ArrayExpress:E-TABM-244, ATCC:CRL-3598, ATCC:CRL-10782, BioSample:SAMN03472816, ChEMBL-Cells:CHEMBL3307365, ChEMBL-Targets:CHEMBL614322, Cosmic:1017163, Cosmic:1136378, Cosmic:1176637, Cosmic:2560249, DepMap:ACH-002327, GEO:GSM756372, GEO:GSM844585, GEO:GSM845396, GEO:GSM1053717, GEO:GSM1172884, GEO:GSM1172975, GEO:GSM1238117, LINCS_HMS:51089, LINCS_LDP:LCL-2082, PharmacoDB:MCF12A_894_2019, PRIDE:PXD005339, PubChem_Cell_line:CVCL_3744, TOKU-E:2381, Wikidata:Q54904301

ID: CVCL_3744

Vendor: ATCC

Catalog Number: CRL-10782

Record Creation Time: 20220427T220750+0000

Record Last Update: 20260829T234552+0000

Ratings and Alerts

No rating or validation information has been found for MCF-12A.

No alerts have been found for MCF-12A.

Data and Source Information

Source: Cellosaurus

Usage and Citation Metrics

We found 352 mentions in open access literature.

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

Tankka AT, et al. (2026) Integrative CRISPR Screening and RNA Analyses Discover an Essential Role for PUF60 Interactions with 3' Splice Sites in Cancer Progression. Cancer research, 86(7), 1586.

Medupe TT, et al. (2026) Bimetallic Anilinopyridinate ruthenium(II,III) complexes: Synthesis, characterisation, and in vitro selective cytotoxicity towards MCF-7 breast cancer cells. Journal of inorganic biochemistry, 283, 113399.

Vykoukal J, et al. (2025) Vesicle-mediated mitochondrial clearance presents an actionable metabolic vulnerability in triple-negative breast cancer. Cell reports. Medicine, 6(12), 102478.

Kumai J, et al. (2025) Metastatic breast cancer cells adapt to a soft environment with limited involvement of mechanotransduction. Experimental cell research, 450(2), 114629.

Bjerring JS, et al. (2025) Intercellular mitochondrial transfer contributes to microenvironmental redirection of cancer cell fate. The FEBS journal, 292(9), 2306.

Branco H, et al. (2025) Preclinical studies on the antitumor and non-toxic effect of combining pirfenidone with vinorelbine and carboplatin in non-small cell lung cancer. International journal of cancer, 156(9), 1756.

Tailor D, et al. (2025) Non-orthosteric inhibition of enolase 1 impedes growth of triple-negative breast cancer. Cell reports. Medicine, 6(11), 102451.

Chang Y, et al. (2024) Development of an orally bioavailable CDK12/13 degrader and induction of synthetic lethality with AKT pathway inhibition. Cell reports. Medicine, 5(10), 101752.

Bronowicka-Adamska P, et al. (2024) Differences in nonoxidative sulfur metabolism between normal human breast MCF-12A and adenocarcinoma MCF-7 cell lines. Analytical biochemistry, 687, 115434.

Treekitkarnmongkol W, et al. (2024) eEF1A2 promotes PTEN-GSK3?-SCF complex-dependent degradation of Aurora kinase A and is inactivated in breast cancer. Science signaling, 17(826), eadh4475.

Cetin M, et al. (2024) A highly potent bi-thiazole inhibitor of LOX rewires collagen architecture and enhances chemoresponse in triple-negative breast cancer. Cell chemical biology.

Okada N, et al. (2023) NFYA promotes malignant behavior of triple-negative breast cancer in mice through the regulation of lipid metabolism. Communications biology, 6(1), 596.

Saatci O, et al. (2023) Targeting TACC3 represents a novel vulnerability in highly aggressive breast cancers with centrosome amplification. Cell death and differentiation, 30(5), 1305.

Sowa-Kasprzak K, et al. (2023) Synthesis, Cytotoxicity and Molecular Docking of New Hybrid Compounds by Combination of Curcumin with Oleanolic Acid. Biomedicines, 11(6).

Bender O, et al. (2023) Vanillin-Based Indolin-2-one Derivative Bearing a Pyridyl Moiety as a Promising Anti-Breast Cancer Agent via Anti-Estrogenic Activity. ACS omega, 8(7), 6968.

Musielak M, et al. (2023) The Role of Functionalization and Size of Gold Nanoparticles in the Response of MCF-7 Breast Cancer Cells to Ionizing Radiation Comparing 2D and 3D In Vitro Models. Pharmaceutics, 15(3).

Piasna-S?upecka E, et al. (2023) Young Shoots of Red Beet and the Root at Full Maturity Inhibit Proliferation and Induce Apoptosis in Breast Cancer Cell Lines. International journal of molecular sciences, 24(8).

Budzianowska A, et al. (2023) Cytotoxic Effect of Phenylethanoid Glycosides Isolated from Plantago lanceolata L. Life (Basel, Switzerland), 13(2).

Wu X, et al. (2023) Effects of adipocyte-conditioned cell culture media on S1P treatment of human triple-negative breast cancer cells. PloS one, 18(5), e0286111.

Demirel D, et al. (2023) Aspergillus Carneus metabolite Averufanin induced cell cycle arrest and apoptotic cell death on cancer cell lines via inducing DNA damage. Scientific reports, 13(1), 6460.