

Resource Summary Report

Generated by [NIF](#) on Sep 17, 2026

MDA-MB-453

RRID:CVCL_0418

Type: Cell Line

Proper Citation

RRID:CVCL_0418

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_0418

Proper Citation: RRID:CVCL_0418

Description: Cell line MDA-MB-453 is a Cancer cell line with a species of origin Homo sapiens (Human)

Sex: Female

Disease: Breast adenocarcinoma

Defining Citation: [PMID:730202](#), [PMID:1961733](#), [PMID:3518877](#), [PMID:9671407](#), [PMID:9815641](#), [PMID:10969801](#), [PMID:11687795](#), [PMID:11789735](#), [PMID:12353263](#), [PMID:12800145](#), [PMID:16142302](#), [PMID:16397213](#), [PMID:16541312](#), [PMID:17157791](#), [PMID:18516279](#), [PMID:19582160](#), [PMID:19593635](#), [PMID:20164919](#), [PMID:20215515](#), [PMID:21378333](#), [PMID:22121396](#), [PMID:22414580](#), [PMID:22460905](#), [PMID:22585861](#), [PMID:22719059](#), [PMID:23601657](#), [PMID:24094812](#), [PMID:24176112](#), [PMID:25485619](#), [PMID:25877200](#), [PMID:25892236](#), [PMID:25984343](#), [PMID:26218769](#), [PMID:26589293](#), [PMID:27397505](#), [PMID:28196595](#), [PMID:28889351](#), [PMID:30787054](#), [PMID:30894373](#), [PMID:30971826](#), [PMID:31068700](#), [PMID:31978347](#), [PMID:35839778](#)

Comments: Population: Caucasian., Part of: PI3K genetic alteration cell panel (ATCC TCP-1028)., Part of: MD Anderson Cell Lines Project., Part of: KuDOS 95 cell line panel., Part of: JWGray breast cancer cell line panel., Part of: ICBP43 breast cancer cell line panel., Part of: COSMIC cell lines project., Part of: Cancer Dependency Map project (DepMap) (includes Cancer Cell Line Encyclopedia - CCLE)., Group: Triple negative breast cancer (TNBC) cell line.

Category: Cancer cell line

Organism: Homo sapiens (Human)

Name: MDA-MB-453

Synonyms: MDA-MB 453, MDA MB 453, MDA-MB453, MDAMB453, MDA-453, MDA453, MD Anderson-Metastatic Breast-453

Cross References: BTO:BTO_0001908, CLO:CLO_0007640, CLO:CLO_0050867, EFO:EFO_0001215, MCCL:MCC:0000315, CLDB:cl3411, CLDB:cl7187, ArrayExpress:E-MTAB-38, ArrayExpress:E-MTAB-783, ArrayExpress:E-MTAB-2706, ArrayExpress:E-MTAB-2770, ArrayExpress:E-MTAB-3610, ArrayExpress:E-TABM-157, ArrayExpress:E-TABM-244, ATCC:HTB-131, BCRC:60429, BioGRID_ORCS_Cell_line:552, BioSample:SAMN01821576, BioSample:SAMN01821647, BioSample:SAMN03472899, BioSample:SAMN10988263, cancercellines:CVCL_0418, CCRID:1101HUM-PUMC000016, CCRID:3101HUMSCSP5044, CCRID:3101HUMTCHu233, Cell_Model_Passport:SIDM00272, ChEMBL-Cells:ChEMBL3307596, ChEMBL-Targets:ChEMBL614334, CLS:305042, Cosmic:687497, Cosmic:871157, Cosmic:897426, Cosmic:904383, Cosmic:908122, Cosmic:923060, Cosmic:934529, Cosmic:979712, Cosmic:991326, Cosmic:997920, Cosmic:1010927, Cosmic:1018468, Cosmic:1027056, Cosmic:1044223, Cosmic:1046931, Cosmic:1047694, Cosmic:1129656, Cosmic:1136356, Cosmic:1152522, Cosmic:1176651, Cosmic:1287911, Cosmic:1289401, Cosmic:1308995, Cosmic:1434956, Cosmic:1524345, Cosmic:1601924, Cosmic:1603222, Cosmic:1609457, Cosmic:2165012, Cosmic:2301532, Cosmic:2318375, Cosmic:2564832, Cosmic:2820307, Cosmic-CLP:908122, DepMap:ACH-000910, DSMZ:ACC-65, DSMZCellDive:ACC-65, EGA:EGAS00001000610, EGA:EGAS00001000978, EGA:EGAS00001002554, FANTOM5_SSTAR:10419-106C5, GDSC:908122, GEO:GSM813, GEO:GSM115117, GEO:GSM217590, GEO:GSM219956, GEO:GSM274656, GEO:GSM344355, GEO:GSM344405, GEO:GSM350530, GEO:GSM421879, GEO:GSM481307, GEO:GSM783928, GEO:GSM844602, GEO:GSM847417, GEO:GSM887300, GEO:GSM888375, GEO:GSM1008910, GEO:GSM1053710, GEO:GSM1172983, GEO:GSM1264071, GEO:GSM1264075, GEO:GSM1264113, GEO:GSM1264117, GEO:GSM1374660, GEO:GSM1374661, GEO:GSM1374662, GEO:GSM1384316, GEO:GSM1401667, GEO:GSM1421431, GEO:GSM1661983, GEO:GSM1664568, GEO:GSM1670086, IARC_TP53:762, IARC_TP53:21146, IARC_TP53:26995, ICLC:HTL01013, IGRhCellID:MDAMB453, IZSLER:BS TCL 247, KCLB:30131, LiGeA:CCL_768, LINCS_HMS:50334, LINCS_LDP:LCL-1485, Lonza:837, NCBI_Iran:C214, PharmacDB:MDAMB453_906_2019, PRIDE:PXD000309, PRIDE:PXD008222, PRIDE:PXD030304, Progenetix:CVCL_0418, PubChem_Cell_line:CVCL_0418, RCB:RCB1192, SLKBase:3613, Wikidata:Q54904642

ID: CVCL_0418

Record Creation Time: 20220427T220756+0000

Record Last Update: 20260913T004834+0000

Ratings and Alerts

No rating or validation information has been found for MDA-MB-453.

No alerts have been found for MDA-MB-453.

Data and Source Information

Usage and Citation Metrics

We found 1504 mentions in open access literature.

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

Wang J, et al. (2026) Systematic annotation of orphan RNAs reveals blood-accessible molecular barcodes of cancer identity and cancer-emergent oncogenic drivers. *Cell reports. Medicine*, 7(2), 102577.

Perurena N, et al. (2026) EZH2 Inhibitors Sensitize Breast Cancer to HER2 Kinase Inhibitors through Cooperative Effects on YAP and Proapoptotic Regulators. *Cancer research*, 86(6), 1467.

Kopp A, et al. (2026) In Vivo Auto-tuning of Antibody-Drug Conjugate Delivery to Maximize Efficacy Using High-Avidity, Low-Affinity Antibodies. *Molecular cancer therapeutics*, 25(4), 610.

Ohashi T, et al. (2026) ZSTK3744, a Novel Aryl Hydrocarbon Receptor Agonist, Exhibits Efficacy against Chemotherapy-Resistant Triple-Negative Breast Cancer. *Cancer research communications*, 6(2), 421.

Tian M, et al. (2026) Targeted antibody-drug conjugates for rhabdomyosarcoma and other FGFR4-expressing cancers. *Cell reports. Medicine*, 7(7), 102922.

Wang H, et al. (2026) ZNF296 Drives Immune Evasion in Epithelial Cancers by Repressing Immune Stimulatory Genes. *Cancer research*, 86(1), 116.

Sun Y, et al. (2026) CircNSD2 promotes metastasis and immune escape by increasing the USP10/SRSF6-mediated alternative splicing of TPM1 in TNBC. *Molecular cancer*, 25(1).

Li K, et al. (2026) The GATA3-RFPL3-ASK1 axis suppresses breast cancer growth and lung metastasis. *Apoptosis : an international journal on programmed cell death*, 31(4).

Rad SK, et al. (2026) eFluor 450 Enables Superior Detection of Intracellular Staphylococcus aureus in High-Autofluorescence Triple-Negative Breast Cancer Cells. *Cytometry. Part A : the journal of the International Society for Analytical Cytology*, 109(2), 135.

Christenson JL, et al. (2026) Metastasis-Associated Wound Repair Promotes Reciprocal Lung Epithelium Activation and Breast Cancer Metastatic Outgrowth. *Cancer research communications*, 6(4), 750.

Wang Z, et al. (2026) RAD51 succinylation regulates homologous recombination and contributes to the chemosensitivity in cancer. *Molecular cell*, 86(4), 585.

Qasem H, et al. (2026) Cell-Penetrating Peptide-Mediated siRNA Targeting of LDHC Suppresses Tumor Growth in a Triple-Negative Breast Cancer Zebrafish Xenograft Model. *Pharmaceutics*, 18(1).

Matsuura K, et al. (2026) Distinct metabolic dependency on BCAA defines cancer stemness and malignancy in human triple-negative breast cancer. *Cell reports*, 45(7), 117630.

McBean B, et al. (2026) Transcriptomic analysis to uncover the mechanism of radiosensitization of AR-positive triple-negative breast cancers with AR inhibition. *NPJ breast cancer*, 12(1).

Zhang Z, et al. (2026) A convergent uPAR-positive tumor ecosystem creates broad vulnerability to CAR T cell therapy. *Cell*, 189(10), 2898.

Ishida M, et al. (2026) AXL-SHC1 signaling axis mediates adaptive resistance to HER2-targeted tyrosine kinase inhibitors in HER2-aberrant lung and gastric cancers. *NPJ precision oncology*, 10(1).

Nath S, et al. (2025) Unlocking the therapeutic potential of rigosertib as a selective therapy for ovarian cancer. *Cell reports. Medicine*, 6(7), 102218.

Harper NW, et al. (2025) RNA Pol II inhibition activates cell death independently from the loss of transcription. *Cell*.

Smoak CN, et al. (2025) ZYS-1 is not an ADAR1 inhibitor. *RNA (New York, N.Y.)*, 31(12), 1703.

Cheng TC, et al. (2025) Fibroblast growth factor receptor four inhibitor FGF401 improves the efficacy of trastuzumab in FGFR4-overexpressing breast cancer cells. *International journal of cancer*, 156(8), 1606.