# Resource Summary Report

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## MG-63

RRID:CVCL_0426
Type: Cell Line

### Proper Citation

(RRID:CVCL_0426)

### Cell Line Information

**URL:** https://web.expasy.org/cellosaurus/CVCL_0426

**Proper Citation:** (RRID:CVCL_0426)

**Sex:** Male

**Defining Citation:** PMID:218153, PMID:883813, PMID:1577731, PMID:2233717, PMID:2823272, PMID:7873286, PMID:8617485, PMID:9144345, PMID:9600771, PMID:12645653, PMID:15736406, PMID:17981215, PMID:19160414, PMID:19363654, PMID:19787792, PMID:20164919, PMID:20215515, PMID:21519327, PMID:22460905, PMID:23129384, PMID:23144859, PMID:24903274, PMID:25382592, PMID:25485619, PMID:25877200, PMID:26320182, PMID:26589293, PMID:27397505, PMID:28196595, PMID:29334376, PMID:30894373, PMID:31068700, PMID:35839778, PMID:36480329

**Comments:** Caution: The reported STR profile from CLS of this cell line was changed in June 2019. Seven conflicts with other sources were resolved., Anecdotal: Have been flown in space on Foton-10 and Foton-M3 to study if differentiation is altered in microgravity (PubMed=9144345; PubMed=9600771; PubMed=24903274)., Omics: Transcriptome analysis by RNAseq., Omics: Transcriptome analysis by microarray., Omics: SNP array analysis., Omics: Protein expression by reverse-phase protein arrays., Omics: Metabolome analysis., Omics: H3K27ac ChIP-seq epigenome analysis., Omics: H3K4me1 ChIP-seq epigenome analysis., Omics: DNA methylation analysis., Omics: Deep quantitative proteome analysis., Omics: Deep exome analysis., Omics: CNV analysis., Omics: Array-based CGH., Characteristics: Can be induced to differentiate by treating the cells with 1,25-dihydroxyvitamin D3 and TGF-beta. The cells do not differentiate into the mineralized state, but stop at the matrix maturation stage (PubMed=1577731)., Population: Caucasian., Part of: MD Anderson Cell Lines Project., Part of: COSMIC cell lines project., Part of: Cancer Dependency Map project (DepMap) (includes Cancer Cell Line Encyclopedia - CCLE)., Group: Space-flown cell line (cellonaut).

**Category:** Cancer cell line

**Name:** MG-63

**Synonyms:** M-G63, MG63

**Cross References:** BTO:BTO_0001596, CLO:CLO_0007699, CLO:CLO_0007701, CLO:CLO_0050808, EFO:EFO_0002234, MCCL:MCC:0000323, CLDB:cl3462, CLDB:cl3463, CLDB:cl3464, CLDB:cl3465, CLDB:cl4934, AddexBio:C0004007/4991, ArrayExpress:E-MTAB-38, ArrayExpress:E-MTAB-783, ArrayExpress:E-MTAB-2706, ArrayExpress:E-MTAB-2770, ArrayExpress:E-MTAB-3610, ATCC:CRL-1427, BCRC:60279, BCRJ:0173, BioSample:SAMN03471910, BioSample:SAMN03472771, BioSample:SAMN10988146, cancercelllines:CVCL_0426, CCRID:1101HUM-PUMC000080, CCRID:3101HUMTCHu124, CCRID:4201HUM-CCTCC00074, CCTCC:GDC0074, Cell_Model_Passport:SIDM00525, ChEMBL-Cells:CHEMBL3308498, ChEMBL-Targets:CHEMBL614347, CLS:300441, Cosmic:755310, Cosmic:908131, Cosmic:931036, Cosmic:931913, Cosmic:1044085, Cosmic:1070844, Cosmic:1074394, Cosmic:1082504, Cosmic:1188475, Cosmic:1529903, Cosmic-CLP:908131, DepMap:ACH-000359, ECACC:86051601, EGA:EGAS00001000610, EGA:EGAS00001000978, ENCODE:ENCBS091SUW, ENCODE:ENCBS462PMF, GDSC:908131, GEO:GSM170251, GEO:GSM320828, GEO:GSM827317, GEO:GSM879217, GEO:GSM887314, GEO:GSM888390, GEO:GSM1670103, GEO:GSM1915004, GEO:GSM1915005, GEO:GSM1915006, GEO:GSM1915007, GEO:GSM2635311, GEO:GSM2635312, GEO:GSM1915033, GEO:GSM1915034, IARC_TP53:21498, IARC_TP53:21660, ICLC:HTL99003, IGRhCellID:MG63, IZSLER:BS TCL 40, JCRB:IFO50108, KCB:KCB 200528YJ, KCLB:21427, LiGeA:CCLE_145, LINCS_LDP:LCL-1428, Lonza:872, NCBI_Iran:C555, PharmacoDB:MG63_924_2019, PRIDE:PXD030304, Progenetix:CVCL_0426, PubChem_Cell_line:CVCL_0426, RCB:RCB1890, TKG:TKG 0294, TOKU-E:2429, Wikidata:Q54905408

**ID:** CVCL_0426

**Record Creation Time:** 20250131T201352+0000

**Record Last Update:** 20250131T203000+0000

## Ratings and Alerts

No rating or validation information has been found for MG-63.

No alerts have been found for MG-63.

## Data and Source Information

**Source:** Cellosaurus

## Usage and Citation Metrics

We found 2510 mentions in open access literature.

**Listed below are recent publications.** The full list is available at FDI Lab - SciCrunch.org.

Li X, et al. (2024) Identification of TNFRSF21 as an inhibitory factor of osteosarcoma based on a necroptosis-related prognostic gene signature and molecular experiments. Cancer cell international, 24(1), 14.

Coleman JC, et al. (2024) The RNA binding proteins LARP4A and LARP4B promote sarcoma and carcinoma growth and metastasis. iScience, 27(4), 109288.

Pezzella M, et al. (2024) Tumor-derived G-CSF induces an immunosuppressive microenvironment in an osteosarcoma model, reducing response to CAR.GD2 T-cells. Journal of hematology & oncology, 17(1), 127.

Zhang Y, et al. (2024) Circ_0002669 promotes osteosarcoma tumorigenesis through directly binding to MYCBP and sponging miR-889-3p. Biology direct, 19(1), 25.

Shen C, et al. (2024) Interaction between p21-activated kinase 4 and ?-catenin as a novel pathway for PTH-dependent osteoblast activation. Journal of cellular physiology, 239(6), e31245.

Ren J, et al. (2024) Augmented drug resistance of osteosarcoma cells within decalcified bone matrix scaffold: The role of glutamine metabolism. International journal of cancer, 154(9), 1626.

Zannini L, et al. (2024) R-loops and impaired autophagy trigger cGAS-dependent inflammation via micronuclei formation in Senataxin-deficient cells. Cellular and molecular

life sciences : CMLS, 81(1), 339.

Lu H, et al. (2024) Photothermal Catalytic Reduction and Bone Tissue Engineering Towards a Three-in-One Therapy Strategy for Osteosarcoma. Advanced materials (Deerfield Beach, Fla.), 36(40), e2408016.

Takagi S, et al. (2024) Frequent copy number gain of MCL1 is a therapeutic target for osteosarcoma. Oncogene.

M?s?r BA, et al. (2024) Novel diarylated tacrine derivatives: Synthesis, characterization, anticancer, antiepileptic, antibacterial, and antifungal activities. Journal of biochemical and molecular toxicology, 38(4), e23706.

Hu X, et al. (2024) MTF2 facilitates the advancement of osteosarcoma through mediating EZH2/SFRP1/Wnt signaling. Journal of orthopaedic surgery and research, 19(1), 467.

Lizardo MM, et al. (2024) Pharmacologic Inhibition of EIF4A Blocks NRF2 Synthesis to Prevent Osteosarcoma Metastasis. Clinical cancer research : an official journal of the American Association for Cancer Research, 30(19), 4464.

Perkins RS, et al. (2024) WNT5B drives osteosarcoma stemness, chemoresistance and metastasis. Clinical and translational medicine, 14(5), e1670.

Xu J, et al. (2023) Tocilizumab (monoclonal anti-IL-6R antibody) reverses anlotinib resistance in osteosarcoma. Frontiers in oncology, 13, 1192472.

Ito K, et al. (2023) Osteoblast-derived extracellular vesicles exert osteoblastic and tumor-suppressive functions via SERPINA3 and LCN2 in prostate cancer. Molecular oncology, 17(10), 2147.

Lin ZS, et al. (2023) EZH2/hSULF1 axis mediates receptor tyrosine kinase signaling to shape cartilage tumor progression. eLife, 12.

Janiszewski T, et al. (2023) Investigation of osteoclast cathepsin K activity in osteoclastogenesis and bone loss using a set of chemical reagents. Cell chemical biology, 30(2), 159.

Zhu D, et al. (2023) hsa-miR-199b-3p suppresses osteosarcoma progression by targeting CCDC88A, inhibiting epithelial-to-mesenchymal transition, and Wnt/beta-catenin signaling pathway. Scientific reports, 13(1), 12544.

Cheng S, et al. (2023) Psoralidin inhibits osteosarcoma growth and metastasis by downregulating ITGB1 expression via the FAK and PI3K/Akt signaling pathways. Chinese medicine, 18(1), 34.

Facchin C, et al. (2023) Molecular Analysis of the Superior Efficacy of a Dual Epidermal Growth Factor Receptor (EGFR)-DNA-Targeting Combi-Molecule in Comparison with Its Putative Prodrugs 6-Mono-Alkylamino- and 6,6-Dialkylaminoquinazoline in a Human Osteosarcoma Xenograft Model. Cells, 12(6).