

Product sheet

MG-63 | 300441

MG-63

Description

MG-63 is a human osteosarcoma cell line established from a 14-year-old patient with osteosarcoma of the femur. The cells are derived from a primary tumor and are characterized by their ability to form osteoid matrix in vitro. MG-63 cells are highly proliferative and are used as a model for studying osteosarcoma biology and drug response. The cells are maintained in DMEM supplemented with 10% fetal bovine serum (FBS) and 1% penicillin-streptomycin. MG-63 cells are highly sensitive to cisplatin and doxorubicin. The cells are also used for studying the effects of mechanical loading on bone cells. MG-63 cells are highly sensitive to mechanical loading and are used for studying the effects of mechanical loading on bone cells. MG-63 cells are highly sensitive to mechanical loading and are used for studying the effects of mechanical loading on bone cells.

Organism Human

Tissue Bone

Disease Osteosarcoma

Metastatic site Lung, Liver, Bone

Synonyms M-G63, MG63

MG-63

Age 14 years

Gender Male

Ethnicity Caucasian

Morphology Epithelial, Adherent

Growth properties High proliferation rate

MG-63

Citation MG-63 (ATCC CRL-1587) | 300441

Biosafety level 1

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Thawing and Culturing Cells

1. Thaw the vial in a 37°C water bath. Transfer the cells to a 15 mL centrifuge tube.
2. Centrifuge at 300 × g for 3 minutes. Remove the supernatant and resuspend the cells in 10 mL of DMEM.
3. Seed the cells into a 75 cm² flask containing 30 mL of DMEM.
4. Incubate the cells in a humidified 5% CO₂ incubator at 37°C.
5. Once cells reach 70-80% confluency, passage them into a new flask.
6. For primary culture, passage cells into a flask with fresh DMEM.
7. For subculturing, passage cells into a flask with DMEM containing 10% FBS.
8. Once cells reach 70-80% confluency, passage them into a new flask.

Incubation Atmosphere

37°C, 5% CO₂, humidified

Flask Coating

None

Freezing Procedure

Resuspend cells in 1 mL of freezing medium (DMEM + 10% FBS + 10% DMSO) and freeze at -80°C.

Shipping Conditions

Store at -80°C during shipping.

Storage Conditions

Store at -150°C to -196°C in liquid nitrogen.

MG-63 / HLA

Sterility

MG-63 cells are tested for sterility using PCR. The results are negative for all tested pathogens.

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A*: '01:01:01

B*: '08:01:01

C*: '07:01:01

DRB1*: '03:01:01

DQA1*: '05:01:01

DQB1*: '02:01:01

DPB1*: '01:01:01, '04:02:01

E: '01:01:01