

MOLM-13 | 305393

General Information

Description MOLM-13 is a human acute myeloid leukemia (AML) cell line, derived from a patient with AML-M5a (monocytic AML). The cell line is characterized by its morphology and growth properties. It is a CD33+, CD13+, and CD15+ cell line. MOLM-13 is a derivative of the MLL gene. It is a cell line that is used for research purposes.

Organism Human

Tissue Bone Marrow

Disease Acute Myeloid Leukemia

Synonyms MOLM13, Molm13, Molm 13

Characteristics

Age 20 years

Gender Male

Ethnicity Caucasian

Morphology Monocytic

Growth properties Adherent

References

Citation MOLM-13 (Cytion 305393)

Biosafety level 1

NCBI_TaxID 9606

CellosaurusAccession CVCL_2119

Product sheet

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Cell Line

Antigen expression CD3-, CD4+, CD14-, CD15+, CD19-, CD33+, CD34-, cy CD68+, HLA-DR-

Mutational profile FLT3, DNMT3A, DNMT3B, DNMT3L, DNMT3A-MLLT3, MLL-MLLT3, MLL-AF9

Genotype

Culture Medium RPMI 1640, w: 2.0 mM β -mercaptoethanol, w: 2.0 g/L NaHCO₃ (Cytion 820700a)

Supplements 10% FBS

Seeding density 5×10^5 cells/ml

Fluid renewal 2-3 times per week

Freeze medium RPMI 1640, w: 2.0 mM β -mercaptoethanol, w: 2.0 g/L NaHCO₃ (Cytion 820700a) + 10% FBS + 10% DMSO

Thawing and Culturing Cells

1. Thaw cells rapidly in a 37°C water bath, transfer to a sterile tube, and centrifuge at 300 x g for 5 minutes.
2. Resuspend cells in 1 ml of culture medium and transfer to a new tube.
3. Dilute cells into 10 ml of culture medium in a 150 cm² flask.
4. Incubate cells in a humidified CO₂ incubator at 37°C for 24 hours.
5. After 24 hours, check for cell attachment and replace medium with fresh culture medium.
6. Once cells are established, passage them into a 25 cm² flask.
7. When cells reach 70-80% confluency, passage them into a 75 cm² flask.
8. Continue to passage cells as needed to maintain a healthy culture.

