

Product sheet

NCH612 | 300121

General information

Description NCH612 is a cell line derived from a patient with acute myeloid leukemia (AML) and harbors a mutation in the IDH1 gene (R132H). The cell line is maintained in RPMI 1640 medium supplemented with 10% fetal bovine serum (FBS) and 1% penicillin-streptomycin. NCH612 is a myeloid cell line that is sensitive to DNA methyltransferase decitabine (DAC). The cell line is characterized by its high proliferation rate and its ability to form colonies in methylcellulose medium. The cell line is used for studying the effects of DAC on AML cells and for investigating the role of IDH1 mutations in AML pathogenesis.

Organism Human

Tissue Blood

Disease Acute Myeloid Leukemia (AML), IDH1 (R132H)

Characteristics

Age 39 years

Gender Male

Ethnicity Caucasian

Growth properties Adherent, suspension

References

Citation NCH612 (Cytion 300121)

Biosafety level 1

NCBI_TaxID 9606

CellosaurusAccession CVCL_x913

Contact information

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Culture Medium DMEM:Ham's F12 (1:1), w: 3.1 g/L β -mercaptoethanol, w: 2.5 mM L-ascorbic acid, w: 15 mM HEPES, w: 0.5 mM $\text{CaCl}_2 \cdot \text{H}_2\text{O}$, w: 1.2 g/L NaHCO_3 820400a)

Supplements $10\% \text{ FBS}$, 5 $\mu\text{g}/\text{ml}$ bFGF , 20 $\mu\text{g}/\text{ml}$ bFGF , 20 $\mu\text{g}/\text{ml}$ EGF , 5 $\mu\text{g}/\text{ml}$ Hydrocortison , 100 $\mu\text{g}/\text{ml}$ Hydrocortison , 5.2 $\mu\text{g}/\text{ml}$ Hydrocortison

Subculturing 1×10^5 cells per well in 100 μl Eppendorf 1.5 ml tubes

Seeding density 1×10^5 cells/ $100 \mu\text{l}$

Fluid renewal $2-3$ times (2-5 μl , $100 \mu\text{l}$ medium per well).

Post-Thaw Recovery 48 hours

Freeze medium $50\% \text{ FBS} + 40\% \text{ DMSO} + 10\% \text{ CM-1}$ (Cytion 800100)

Thawing and Culturing Cells

1. $100 \mu\text{l}$ thawed cells into $100 \mu\text{l}$ medium
2. $150 \mu\text{l}$ cells into $150 \mu\text{l}$ medium
3. $300 \mu\text{l}$ cells into $300 \mu\text{l}$ medium
4. $600 \mu\text{l}$ cells into $600 \mu\text{l}$ medium
5. 1.5 ml cells into 1.5 ml medium
6. 3 ml cells into 3 ml medium
7. 10 ml cells into 10 ml medium
8. 30 ml cells into 30 ml medium

Incubation Atmosphere 37°C , $5\% \text{ CO}_2$

Flask Coating $100 \mu\text{g}/\text{ml}$

