



<b>Cell line:</b>	<b>THP-1</b>
<b>DSMZ no.:</b>	<b>ACC 16</b>
<b>Species:</b>	human ( <i>Homo sapiens</i> )
<b>Cell type:</b>	acute monocytic leukemia
<b>Origin:</b>	established from the peripheral blood of a 1-year-old boy with acute monocytic leukemia (AML) at relapse in 1978; the cells can be used for induction of differentiation studies; the cells were described to produce lysozyme and to be phagocytic; carries t(9;11)(p21;q23) leading to MLL-MLLT3 (MLL-AF9) fusion gene
<b>Reference(s):</b>	14493 , 15021 , 15022
<b>Biosafety level:</b>	1
<b>Permissions and restrictions:</b>	A

#### **DSMZ Cell Culture Data:**

<b>Morphology:</b>	round, single cells in suspension, partly in clusters; image ; image
<b>Medium:</b>	90% RPMI 1640 + 10% h.i. FBS
<b>Subculture:</b>	maintain at $0.1\text{--}1.0 \times 10^6$ cells/ml; split 1:2 to 1:3 every 3-4 days; seed out at ca. $0.5 \times 10^6$ cells/ml; note that after thawing cell viability may drop to about 40%, but cells will recover within a week or so
<b>Incubation:</b>	at 37 °C with 5% CO <sub>2</sub>
<b>Doubling time:</b>	ca. 35-50 hours
<b>Harvest:</b>	saturation density at about $1.0 \times 10^6$ cells/ml
<b>Storage:</b>	frozen with 70% medium, 20% FBS, 10% DMSO

#### **DSMZ Scientific Data:**

<b>Mycoplasma:</b>	contamination was eliminated with Ciprobay (ciprofloxacin), then negative in DAPI, microbiological culture, PCR assays
<b>Immunology:</b>	CD3 -, CD4 +, CD13 +, CD15 +, CD19 -, CD34 -, cyCD68 +, HLA-DR +; image
<b>Fingerprint:</b>	multiplex PCR of minisatellite markers revealed a unique DNA profile
<b>Species:</b>	confirmed as human with IEF of AST, MDH, NP
<b>Cytogenetics:</b>	human near-tetraploid karyotype - 94(88-96)<4n>XY/XXY, -Y, +1, +3, +6, +6, -8, -13, -19, -22, -22, +2mar, add(1)(p11), del(1)(q42.2), i(2q), del(6)(p21)x2-4, i(7p), der(9)t(9;11)(p22;q23)i(9)(p10)x2, der(11)t(9;11)(p22;q23)x2, add(12)

(q24)x1-2, der(13)t(8;13)(p11;p12), add(?18)(q21) - carries t(9;11) associated with AML M5

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Molec. Genetics: expression of fusion gene MLL-MLLT3 (MLL-AF9) confirmed by RT-PCR

Viruses: ELISA: reverse transcriptase negative; PCR: EBV -, HBV -, HCV -, HHV-8 -, HIV -, HTLV-I/II -, MLV -, SMRV -

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Supplied as:	Delivery form	Prices
	Frozen culture	360,- €
	Growing culture (please inquire for exact delivery time)	720,- €
	DNA isolated from cell line (25 µg)	440,- €
	DNA isolated from cell line (5 µg)	100,- €

[see price list](#)

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[Print data sheet](#)

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