

Cell Biology

ATCC® Number: **CCL-240™** [Order this Item](#) Price: **\$279.00**

Designations: HL-60

Depositors: RC Gallo

[Biosafety Level:](#) 1

Shipped: frozen

Medium & Serum: [See Propagation](#)

Growth Properties: suspension

Organism: *Homo sapiens* (human)
myeloblastic

Morphology:



Organ: peripheral blood

Source: **Disease:** acute promyelocytic leukemia

Cell Type: promyeloblast;

Cellular Products: tumor necrosis factor (TNF), also known as tumor necrosis factor alpha (TNF-alpha, TNF alpha), after stimulation with phorbol myristic acid [[23403](#)]

Permits/Forms: In addition to the [MTA](#) mentioned above, other [ATCC and/or regulatory permits](#) may be required for the transfer of this ATCC material. Anyone purchasing ATCC material is ultimately responsible for obtaining the permits. Please [click here](#) for information regarding the specific requirements for shipment to your location.

Applications: transfection host ([Nucleofection technology from Lonza Roche Transfection Reagents](#))

Receptors: complement, expressed [[1050](#)]
Fc, expressed [[1050](#)]

Tumorigenic: Yes

Oncogene: myc +

Amelogenin: X
CSF1PO: 13,14
D13S317: 8,11
D16S539: 11

DNA Profile (STR): D5S818: 12
D7S820: 11,12
THO1: 7,8
TPOX: 8,11
vWA: 16

Cytogenetic Analysis: The stemline chromosome number is pseudodiploid with the 2S component occurring at 6.2%. Five markers (M2 through M6) were common to most S metaphases. DM's, which varied in numbers per cell, occurred in all metaphases karyotyped. HSR chromosomes were not detected.

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Isoenzymes:	AK-1, 1 ES-D, 1 G6PD, B GLO-I, 1 Me-2, 1 PGM1, 1 PGM3, 1
Age:	36 years
Gender:	female
Ethnicity:	Caucasian
Comments:	<p>HL-60 is a promyelocytic cell line derived by S.J. Collins, et al. Peripheral blood leukocytes were obtained by leukopheresis from a 36-year-old Caucasian female with acute promyelocytic leukemia. [22902]</p> <p>HL-60 cells spontaneously differentiate and differentiation can be stimulated by butyrate, hypoxanthine, phorbol myristic acid (PMA, TPA), dimethylsulfoxide (DMSO, 1% to 1.5%), actinomycin D, and retinoic acid. [1229]</p> <p>The cells exhibit phagocytic activity and responsiveness to chemotactic stimuli. [1050]</p> <p>The line is positive for myc oncogene expression.</p>
Propagation:	<p>ATCC complete growth medium: The base medium for this cell line is ATCC-formulated Iscove's Modified Dulbecco's Medium, Catalog No. 30-2005. To make the complete growth medium, add the following components to the base medium: fetal bovine serum to a final concentration of 20%.</p> <p>Atmosphere: air, 95%; carbon dioxide (CO₂), 5%</p> <p>Temperature: 37.0°C</p>
Subculturing:	<p>Protocol: Cultures can be maintained by the addition of fresh medium or replacement of medium. Alternatively, cultures can be established by centrifugation with subsequent resuspension at 1 X 10⁽⁵⁾ viable cells/ml. Do not allow cell concentration to exceed 1 X 10⁽⁶⁾ cells/ml.</p> <p>Interval: Maintain cell density between 1 X 10⁽⁵⁾ and 1 X 10⁽⁶⁾ viable cells/ml.</p> <p>Medium Renewal: Every 2 to 3 days</p>
Preservation:	<p>Freeze medium: Complete growth medium supplemented with 5% (v/v) DMSO</p> <p>Storage temperature: liquid nitrogen vapor phase</p>
Related Products:	<p>Recommended medium (without the additional supplements or serum described under ATCC Medium):ATCC 30-2005</p> <p>recommended serum:ATCC 30-2020</p> <p>purified DNA:ATCC CCL-240D</p> <p>purified RNA:ATCC CCL-240R</p>

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