

Code:	0248
Cell Line:	WEHI-3
Species:	Mus musculus Vulgar Name: Mouse; Balb/C
Tissue:	Peripheral Blood
Morphology:	Macrophage
Disease:	Leukemia
Growth Properties:	Suspension (Some Adherent Cells)
Derivation:	This myelomonocytic leukemia macrophage-like cell line was derived from a BALB/c mouse
Applications:	The cells exhibit only weak effector activity in antibody dependent cell mediated cytotoxicity.
Products:	Lysozyme; granulocyte colony stimulating factor; G-CSF; interleukin-3; IL-3
Biosafety:	1
Additional info:	It produces the constitutive enzyme lysozyme, interleukin-3 and the granulocyte colony-stimulating activity (CSA). Its growth is inhibited by concentrations of LPS as low as 4.0 ng/mL and blocked completely at higher concentrations. Dextran sulfate also inhibits growth in concentrations of 30 to 40 µg/mL. Production of lysozyme and CSA is not inhibited or is actually enhanced during inhibition of cell growth. The cell surface bears receptor for immunoglobulin and complement. WEHI-3 lines exhibit only weak effector activity against sheep erythrocytes or the tumor target EL-4 in an antibody-dependent cell mediated cytotoxic system.
Culture Medium:	Iscove's Modified Dulbecco's Medium (IMDM) contains 4 mM L-glutamine, 4500 mg/L glucose, and 1500 mg/L sodium bicarbonate + 0.05 mM 2-mercaptoethanol + fetal bovine serum to a final concentration of 10%.

Subculturing: 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 2×10^5 viable cells/mL. Maintain cell density between 2×10^5 and 2×10^6 viable cells/mL. Adherent cells may be harvested by scraping.

Medium Renewal: Every 2 to 3 days.

Subcultivation ratio:

Culture Conditions: Atmosphere: air, 95%; carbon dioxide (CO₂), 5% Temperature: 37°C

Cryopreservation: 95% FBS + 5% DMSO (Dimethyl sulfoxide)

Thawing Frozen Cells: SAFETY PRECAUTION: It is highly recommended that protective gloves and clothing always be used and a full face mask always be worn when handling frozen vials. It is important to note that some vials leak when submerged in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vessel exploding or blowing off its cap with dangerous force creating flying debris. 1. Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the O-ring and cap out of the water. Thawing should be rapid (approximately 2 minutes). 2. Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% ethanol. All of the operations from this point on should be carried out under strict aseptic conditions. 3. For cells that are sensitive to DMSO it is recommended that the cryoprotective agent be removed immediately. Transfer the vial contents to a centrifuge tube containing 9.0 mL complete culture medium and spin at approximately $125 \times g$ for 5 to 7 minutes. 4. Discard the supernatant and Resuspend cell pellet with the recommended complete medium (see the specific batch information for the culture recommended dilution ratio). 5. Incubate the culture in an appropriate atmosphere and temperature (see "Culture Conditions" for this cell line). NOTE: It is important to avoid excessive alkalinity of the medium during recovery of the cells. It is suggested that, prior to the addition of the vial contents, the culture vessel containing the growth medium be placed into the incubator for at least 15 minutes to allow the medium to reach its normal pH (7.0 to 7.6).

References: Cancer Res. 37: 546-550, 1977; Differentiation 11; 59-63, 1978; Blood 59: 761-767, 1982



BANCO DE CÉLULAS DO RIO JANEIRO

Data Sheet

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ATCC: TIB-68