

WEHI-3 Cells | 400381

General information

Organism	Mouse
Tissue	Peripheral blood
Disease	Leukemia
Synonyms	WEHI 3, WEHI3, Wehi-3

Characteristics

Morphology	Macrophage-like
Cell type	Myelomonocyte
Growth properties	Suspension

Identifiers / Biosafety / Citation

Citation	WEHI-3 (Cytion catalog number 400381)
Biosafety level	2

Expression / Mutation

Receptors expressed	Immunoglobulin (Fc), complement (C3)
Viruses	Ectromelia virus (mousepox) negative
Products	Lysozyme, granulocyte colony stimulating activity (G-CSA), interleukin-3 (interleukin 3, IL-3)

Handling

Culture Medium	RPMI 1640, w: 2.1 mM stable Glutamine, w: 2.0 g/L NaHCO ₃ (Cytion article number 820700a)
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Medium supplements

Supplement the medium with 10% FBS

Subculturing

Cultures can be maintained by addition or replacement of fresh medium. Start cultures at 2×10^5 cells/ml and maintain between 1×10^5 and 1×10^6 cells/ml. Adherent cells can be recovered by scraping.

Split ratio

A ratio of 1:3 is recommended

Fluid renewal

2 to 3 times per week

Freeze medium

CM-1 (Cytion catalog number 800100) or CM-ACF (Cytion catalog number 806100)

Handling of cryopreserved cultures

1. Confirm that the vial remains deeply frozen upon delivery, as cells are shipped on dry ice to maintain optimal temperatures during transit.
2. Upon receipt, either store the cryovial immediately at temperatures below -150°C to ensure the preservation of cellular integrity, or proceed to step 3 if immediate culturing is required.
3. For immediate culturing, swiftly thaw the vial by immersing it in a 37°C water bath with clean water and an antimicrobial agent, agitating gently for 40-60 seconds until a small ice clump remains.
4. Perform all subsequent steps under sterile conditions in a flow hood, disinfecting the cryovial with 70% ethanol before opening.
5. Carefully open the disinfected vial and transfer the cell suspension into a 15 ml centrifuge tube containing 8 ml of room-temperature culture medium, mixing gently.
6. Centrifuge the mixture at $300 \times g$ for 3 minutes to separate the cells and carefully discard the supernatant containing residual freezing medium. Optionally, skip centrifugation but remove any remaining freezing medium after 24 hours.
7. Gently resuspend the cell pellet in 10 ml of fresh culture medium. For adherent cells, divide the suspension between two T25 culture flasks; for suspension cultures, transfer all the medium into one T25 flask to promote effective cell interaction and growth.
8. Adhere to established subculture protocols for continued growth and maintenance of the cell line, ensuring reliable experimental outcomes.

Quality control / Genetic profile / HLA

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Sterility

Mycoplasma contamination is excluded using both PCR-based assays and luminescence-based mycoplasma detection methods.

To ensure there is no bacterial, fungal, or yeast contamination, cell cultures are subjected to daily visual inspections.