

Banco de Células do Rio de Janeiro

Data Sheet

PAGE 1/3

BCRJ Code: 0373

Cell Line: MONO-MAC-6

Species: Homo sapiens

Vulgar Name: Human

Morphology: Single, round/multiformed cells or small clusters of cells in suspension, sometimes

loosely adherent; 1-5% giant cells.

Disease: Acute Monocytic Leukemia

Growth Properties: suspension, sometimes loosely adherent

Sex: Male

Age/Ethinicity: 64 Year /

Derivation: Established from the peripheral blood of a 64-year-old man with relapsed acute

monocytic leukemia (AML FAB M5) in 1985 following myeloid metaplasia.

Biosafety: 1

Culture Medium: RPMI 1640 with 2 mM L-glutamine, 10 μg/mL human insulin and 10% of fetal bovine

serum.

Cultures can be maintained by the addition of fresh medium or replacement of

medium. Alternatively, cultures can be established by centrifugation with

Subculturing: subsequent resuspension at 0,3 X 106 viable cells/mL. Maintain cell density between

0,3 X 106 and 1.0 X 106 viable cells/mL. NOTE: Do not allow the cell concentration to

exceed 3 x 10e6 cells/mL.

Subculturing

Subcultivation 1:3 a 1:5

Ratio:

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





Banco de Células do Rio de Janeiro

Data Sheet

PAGE 2/3

Cryopreservation:

95% FBS + 5% DMSO (Dimethyl sulfoxide)

SAFETY PRECAUTION: It is strongly recommended to always wear protective gloves, clothing, and a full-face mask when handling frozen vials. Some vials may leak when submerged in liquid nitrogen, allowing nitrogen to slowly enter the vial. Upon thawing, the conversion of liquid nitrogen back to its gas phase may cause the vial to explode or eject its cap with significant force, creating flying debris.

- 1. Thaw the vial by gently agitating it in a 37°C water bath. To minimize 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 its contents are thawed and decontaminate it by dipping in or spraying with 70% ethanol. From this point, all operations must be performed under strict aseptic conditions.

Thawing Frozen Cells:

- 3. For cells sensitive to DMSO, it is recommended to remove the cryoprotective agent immediately. Transfer the vial contents to a centrifuge tube containing 9.0 mL of complete culture medium and centrifuge at approximately 125 × g for 5 to 7 minutes.
- 4. Discard the supernatant and resuspend the cell pellet in the recommended complete medium (see specific batch information for the appropriate dilution ratio). 5. Incubate the culture under appropriate atmospheric and temperature conditions (see "Culture Conditions" for this cell line).

NOTE: It is important to avoid excessive alkalinity of the medium during cell recovery. To minimize this risk, it is recommended to place the culture vessel containing the growth medium in the incubator for at least 15 minutes before adding the vial contents. This allows the medium to stabilize at its normal pH (7.0 to 7.6).



Banco de Células do Rio de Janeiro

Data Sheet

PAGE 3/3

References:

Drexler, H. G., Quentmeier, H., MacLeod, R. A. (2004). Malignant hematopoietic cell lines: in vitro models for the study of MLL gene alterations. Leukemia: official journal of the Leukemia Society of America, Leukemia Research Fund, U.K 18 (2): 227-232. http://www.ncbi.nlm.nih.gov/pubmed/14671638 Ziegler-Heitbrock, H. W., Thiel, E., Futterer, A., Herzog, V., Wirtz, A., Riethmuller, G. (1988). Establishment of a human cell line (Mono Mac 6) with characteristics of mature monocytes. International journal of cancer. Journal international du cancer 41 (3): 456-461. http://www.ncbi.nlm.nih.gov/pubmed/3162233. Taktak, Y. S., Selkirk, S., Bristow, A. F., Carpenter, A., Ball, C., Rafferty, B., Poole, S. (1991). Assay of pyrogens by interleukin-6 release from monocytic cell lines. J Pharm. Pharmacol 43 (8): 578-582. http://www.ncbi.nlm.nih.gov/pubmed/1681074. Hoffmann, S., Peterbauer, A., Schindler, S., Fennrich, S., Poole, S., Mistry, Y., Montag-Lessing, T., Spreitzer, I., Loschner, B., van, A. M., Bos, R., Gommer, M., Nibbeling, R., Werner-Felmayer, G., Loitzl, P., Jungi, T., Brcic, M., Brugger, P., Frey, E., Bowe, G., Casado, J., Coecke, S., de, L. J., Mogster, B., Naess, L. M., Aaberge, I. S., Wendel, A., Hartung, T. (2005). International validation of novel pyrogen tests based on human monocytoid cells. J Immunol.Methods 298 (1-2): 161-173. http://www.ncbi.nlm.nih.gov/pubmed/15847806 (2012). The Monocytoid Cell Line

Mono Mac 6 (MM6)/IL-6 In Vitro Pyrogen Test. ICCVAM Test Method Evaluation Report: Appendix C5 http://iccvam.niehs.nih.gov/docs/pyrogen/TMER/Appx-C5.pdf.

Depositors: Banco de Células do Rio de Janeiro

Cellosaurus: CVCL 1426

