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BCRJ Code: 0373

Cell Line: MONO-MAC-6

Species: Homo sapiens

Vulgar Name: Human

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

loosely adherent; 1-5% giant cells.

Disease: Acute Monocytic Leukemia

Growth Properties: suspension, sometimes loosely adherent

Sex: Male

Age/Ethinicity: 64 Year /

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

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

Biosafety: 1

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

serum.

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 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

Subculturing:

1:3 a 1:5

Ratio:

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



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Cryopreservation:

95% FBS + 5% DMSO (Dimethyl sulfoxide)

be used and a full face mask always be worn when handling frozen vials. It is important to note that some vials leak when submersed 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 Oring 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 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 x 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 a 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

SAFETY PRECAUTION: Is highly recommend that protective gloves and clothing always

Thawing Frozen Cells:



@bcrj_apabcam

7.6).





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References:

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.,

Drexler, H. G., Quentmeier, H., MacLeod, R. A. (2004). Malignant hematopoietic cell

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.

International validation of novel pyrogen tests based on human monocytoid cells. J

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).

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Immunol.Methods 298 (1-2): 161-173.