



NIH AIDS Reagent Program

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DATA SHEET

Reagent: THP-1 Cells

Catalog Number: 9942

Lot Number: 170178

Release Category: A

Provided: 1 mL of cells
Post thaw cell count = 2.4×10^6 cells/mL
Post thaw cell viability = 69%
Cell viability increased to 87% after 3 days in culture.

Cell Type: Human monocytic leukemia cell line

Propagation Medium: RPMI 1640, 90%; fetal bovine serum, 10%; 1.0 mM sodium pyruvate; 0.05 mM 2-mercaptoethanol

Freeze Medium: Donor Provided Freeze Media: RPMI 1640, 70%; fetal bovine serum, 20%; DMSO, 10%
Current Freeze Media: RPMI 1640, 50%; fetal bovine serum, 40%; DMSO, 10%

Growth Characteristics: This is a slow growing cell line.

Morphology: Suspension, Monocyte cell line

Sterility: Negative for mycoplasma, bacteria and fungi

Description: A human monocyte cell line

ALL RECIPIENTS OF THIS MATERIAL MUST COMPLY WITH ALL APPLICABLE BIOLOGICAL, CHEMICAL, AND/OR RADIOCHEMICAL SAFETY STANDARDS INCLUDING SPECIAL PRACTICES, EQUIPMENT, FACILITIES, AND REGULATIONS. NOT FOR USE IN HUMANS.

Special Characteristics: Derived from the peripheral blood of an 1 year old boy with acute monocytic leukemia, this cell line expresses CD4 and utilizes CXCR4 as a co-receptor. It has Fc and C3b receptors, but does not have surface or cytoplasmic immunoglobulins. THP-1 Cells express low levels of endogenous DC-SIGN, and are used as a parental line in deriving THP-1 DC-SIGN+ Cells (cat# 9943).

Note: Previously referred to as THP-1 ATCC Cells.

Recommended Storage: Keep the reagent in liquid nitrogen.

Contributor: Drs. Li Wu and Vineet N. KewalRamani, HIV Drug Resistance Program, NCI

References: Wu, L., T. D. Martin, M. Carrington and V. N. KewalRamani. (2004). Raji B cells, misidentified as THP-1 cells, stimulate DC-SIGN-mediated HIV transmission. *Virology*, 318(1), 17-23. doi:10.1016/j.virol.2003.09.028 [PUBMED](#)

Tsuchiya, S., M. Yamabe, Y. Yamaguchi, Y. Kobayashi, T. Konno and K. Tada. (1980). Establishment and characterization of a human acute monocytic leukemia cell line (THP-1). *Int J Cancer*, 26(2), 171-6. [PUBMED](#)

NOTE: Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: THP-1 Cells from Drs. Li Wu and Vineet N. KewalRamani (cat# 9942) ." Also include the reference cited above in any publications.

Last Updated January 10, 2020

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