



NIH AIDS Reagent Program
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DATA SHEET

Reagent:	MT-4 Cells
Catalog Number:	120
Lot Number:	170172
Release Category:	A
Provided:	1 mL of cells Post thaw cell count = 3.3×10^6 cells/Vial Post thaw cell viability = 78 %
Cell Type:	Human T cell leukemia
Propagation Medium:	RPMI 1640 , 90%; fetal bovine serum, 10%; penicillin-streptomycin
Freeze Medium:	RPMI 1640 , 50%; fetal bovine serum, 40%; DMSO, 10%
Morphology:	Suspension, Lymphoblast Cell Line
Sterility:	Negative for mycoplasma, bacteria, and fungi
Description:	HTLV-I transformed cell line. MT-4 cells express CD4 ⁺ , Anti-CD4 ⁺ , and IL-2 receptor ⁺ .
Special Characteristics:	Established by co-culture of leukemic cells from a patient with adult T-cell leukemia in Japan with male cord blood lymphocytes. MT-4 cells carry HTLV-1 and support the growth of HIV. They are very useful for cytotoxicity inhibition assays for antiviral drugs.

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.

Recommended Storage:	Keep the reagent in liquid nitrogen.
Contributor:	Dr. Douglas Richman
References:	<p>Harada, S., Koyanagi, Y., & Yamamoto, N. (1985). Infection of HTLV-III/LAV in HTLV-I-carrying cells MT-2 and MT-4 and application in a plaque assay. Science, 229(4713), 563-566. PUBMED</p> <p>Larder, B. A., Darby, G., & Richman, D. D. (1989). HIV with reduced sensitivity to zidovudine (AZT) isolated during prolonged therapy. Science, 243(4899), 1731-1734. PUBMED</p> <p>Pauwels, R., De Clercq, E., Desmyter, J., Balzarini, J., Goubau, P., Herdewijn, P., . . . Vandeputte, M. (1987). Sensitive and rapid assay on MT-4 cells for detection of antiviral compounds against the AIDS virus. J Virol Methods, 16(3), 171-185. PUBMED</p>
NOTE:	Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: MT-4 Cells from Dr. Douglas Richman (cat#120)." Also include the reference cited above in any publications.
Last Updated	October 06, 2020

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