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DATA SHEET

Reagent:	A3.01 Cells
Catalog Number:	166
Lot Number:	150225
Release Category:	C
Provided:	1 ml of cells at 5.3 x 10^6 cells/ml). Viability is 71%.
Cell Type:	HAT-sensitive derivative of CEM, a human T-cell line derived from the peripheral blood buffy coat of a four-year-old Caucasian female with acute lymphoblastic leukemia.
Propagation Medium:	RPMI 1640, 90%; fetal bovine serum, 10%.
Freeze Medium:	Propagation medium, 90%; DMSO, 10%.
Growth Characteristics:	When thawing, gently wash out the DMSO with 37°C medium and seed the initial culture at 1 x 10^6 cells/mL. Cells quickly recover viability over 3 days. Passage the cells every three days to give a concentration of 1 x 10^6 cells/ml. Cells grow in single cell suspension. Doubling time is 24 hours. A3.01 has also been grown successfully in OPTI-MEM medium containing 2.5% fetal bovine serum, 2.0 mM L-glutamine, 100 U/ml penicillin and 100 µg/ml streptomycin.
Morphology:	Mature lymphocyte
Sterility:	Negative for bacteria, mycoplasma, and fungi.
Description:	A3.01 cells are a HAT-sensitive derivative of CEM cells that support HIV-1 replication.

Special Characteristics:	A3.01 was selected by growth in hypoxanthine and aminopterin-containing medium. It is suitable for human T-lymphocyte fusions. Cells are Leu-3+, Leu-8+, Leu-1+, *tac*-, transferrin receptor+, sensitive to infection with LAV, and susceptible to cytopathic effects when infected.
Recommended Storage:	Liquid nitrogen.
Contributor:	Dr. Thomas Folks.
References:	Buttke TM, Folks TM. Complete replacement of membrane cholesterol with 4,4', 14-trimethyl sterols in a human T cell line defective in lanosterol demethylation. *J Biol Chem* **265**:8819-8826, 1992. Folks T, Benn S, Rabson A, Theodore T, Hoggan MD, Martin M, Lightfoote M, Sell K. Characterization of a continuous T-cell line susceptible to the cytopathic effects of the acquired immunodeficiency syndrome (AIDS)-associated retrovirus. *Proc Natl Acad Sci USA* **82**:4539-4543, 1985.
NOTE:	Acknowledgment for publications should read "The following reagent was obtained from the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: A3.01 cells (cat# 166) from Dr. Thomas Folks." Also include the references cited above in any publications. **Scientists at for-profit institutions or who intend commercial use of this reagent must contact the NIH Office of Technology Transfer, Email: NIAIDAIDSReagent@niaid.nih.gov, before the reagent can be released. Please specify the name and a description of the intended use of the reagent.**
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