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DATA SHEET

Reagent:	ACH-2 Cells
Catalog Number:	349
Lot Number:	140079
Release Category:	C
Provided:	4.5 x 10^6 cells/ml (1 mL provided). Viability is 61%. Viability is low post-thaw but cells recover quickly.
Cell Type:	Subclone A3.01, which is derived from CEM, a human T cell line originally isolated from a four-year-old Caucasian female with acute lymphoblastic leukemia.
Propagation Medium:	RPMI 1640 supplemented with 10 mM HEPES, 2 mM L-glutamine, 90%; heat inactivated fetal bovine serum, 10%.
Freeze Medium:	RPMI 1640, 82.5%; heat inactivated fetal bovine serum, 10%; DMSO, 7.5%.
Growth Characteristics:	Cells grow in single cell suspension with some visible clumping. Passage the cells every three days to give a concentration of 1 x 10^6 cells/ml. Doubling time is 24 hours. ACH-2 cells require RPMI 1640 with supplements for regular growth but they can also be grown in OPTI-MEM containing 2.5% fetal bovine serum, 2.0 mM L-glutamine, 100 U/ml penicillin, 100 µg/ml streptomycin and 0.5 µM ß-mercaptoethanol.
Description:	HIV-1 latent T cell clone with one integrated proviral copy.
Special Characteristics:	Cells are CD4-, CD5+, transferrin receptor+, Leu-1+, HIV-1+. Parent A3.01 cells were infected with LAV and cloned by limiting dilution. ACH-2 is a clone that survived infection and constantly produces low levels of supernatant RT and p24. Can be induced with phorbol myristate acetate or TNF-α to secrete high levels of infectious HIV-1.
Recommended Storage:	Liquid nitrogen

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.

Contributor:	Dr. Thomas Folks.
References:	Clouse KA, Powell D, Washington I, Poli G, Strebel K, Farrar W, Barstad P, Kovacs J, Fauci AS, Folks TM. Monokine regulation of human immunodeficiency virus-1 expression in a chronically infected human T cell clone. *J Immunol* **142**:431-438, 1989. Folks TM, Clouse KA, Justement J, Rabson A, Duh E, Kehrl JH, Fauci AS. Tumor necrosis factor a induces expression of human immunodeficiency virus in a chronically infected T-cell clone. *Proc Natl Acad Sci USA* **86**:2365-2368, 1989.
NOTE:	Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: ACH-2 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.**
Last Updated	May 16, 2016

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