



NIH AIDS Reagent Program

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DATA SHEET

Reagent:	RevCEM-E7 Cells
Catalog Number:	13435
Lot Number:	180241
Release Category:	C
Provided:	1 mL of cells Post thaw cell count = 5×10^6 cells/mL Post thaw cell viability = 90%
Cell Type:	Human CD4+ lymphoblastoid cell line.
Propagation Medium:	90% RPMI, 10% Heat-inactivated Fetal Calf Serum. NEAA (1:100 of 10mM), Na-pyruvate (1:100 of 100mM), HEPES (1:100 of 1M), L-glutamine (1:50 of 200mM)
Freeze Medium:	10% DMSO, 90% Propagation Medium
Growth Characteristics:	Thaw into 4ml of media and plate in one well of a 6-well plate. Passage every 48hr from $1-1.2 \times 10^6$ cells/ml to 3×10^5 cells/ml, moderate growth speed. Cells grow best in up to 6ml media per well of a 6-well plate.
Morphology:	Semi-circular suspension cell line. May be slightly elongated with one tapering end.
Sterility:	Negative for mycoplasma, bacteria and fungi.
Description:	RevCEM-E7 is a highly sensitive indicator cell line for HIV infection.

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: RevCEM parental cell line was single cell sub-cloned by limiting dilution. Clones derived from single cells were expanded into duplicate 96-well plates, one optical and one standard tissue culture for continued growth. The optical plate was infected with NL4-3 and optical wells were scanned by microscopy to find the clones with highest infection percentage by GFP expression. The clone E7 was selected based on >70% GFP positive cells upon infection rate, expanded from the uninfected replicate plate and frozen.

Recommended Storage: Keep the reagent in liquid nitrogen.

Contributor: Dr. Alex Sigal

References: Jackson, L., J. Hunter, S. Cele, I. M. Ferreira, A. C. Young, F. Karim, R. Madansein, K. J. Dullabh, C. Y. Chen, N. J. Buckels, Y. Ganga, K. Khan, M. Boule, G. Lustig, R. A. Neher and A. Sigal. (2018). Incomplete inhibition of HIV infection results in more HIV infected lymph node cells by reducing cell death. *Elife*, 7. doi:10.7554/eLife.30134 [PUBMED](#)

Boule, M., T. G. Muller, S. Dahling, Y. Ganga, L. Jackson, D. Mahamed, L. Oom, G. Lustig, R. A. Neher and A. Sigal. (2016). HIV Cell-to-Cell Spread Results in Earlier Onset of Viral Gene Expression by Multiple Infections per Cell. *PLoS Pathog*, 12(11), e1005964. doi:10.1371/journal.ppat.1005964 [PUBMED](#)

Wu, Y., Beddall, M. H. and Marsh, J. W. (2007). Rev-dependent indicator T cell line. *Curr HIV Res*, 5(4), 394-402. doi:10.2174/157016207781024018 [PUBMED](#)

NOTE: Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: RevCEM-E7 Cells from Dr. Alex Sigal (cat# 13435)." Also include the references cited above in any publications.

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