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DATA SHEET

Reagent:	RevCEM-D4 Cells
Catalog Number:	13437
Lot Number:	180243
Release Category:	C
Provided:	1 mL of cells Post thaw cell count = 5 x 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 1-1.2e6 cells/ml to 3e5 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-D4 is a highly sensitive indicator cell line for HIV infection expressing high levels of both CCR5 and CXCR4.

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-E7 clone (cat# 13435) was infected with the Human CCR5 Expression Vector (pBABE.CCR5) (cat# 3331) which stably expressed CCR5 under the LTR promoter, and 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 the HIV-1 NL4-3 AD8 Infectious Molecular Clone (pNL(AD8)) (cat# 11346) and wells were scanned by microscopy to find clones which maintained similar GFP expression to the parental RevCEM-E7 clone. This clone was then expanded from the uninfected replicate plates 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. Boulle, 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 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-D4 Cells from Dr. Alex Sigal (cat# 13437)." Also include the references cited above in any publications.
Last Updated	May 15, 2020

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