NIH AIDS Reagent Program
20301 Century Boulevard
Building 6, Suite 200
Germantown, MD 20874
USA

Phone: 240 686 4740
Fax: 301 515 4015
aidsreagent.org

DATA SHEET

Reagent:	RevCEM-G2 Cells
Catalog Number:	13436
Lot Number:	180242
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-G2 is an indicator cell line for HIV infection. It expresses Rev-dependent GFP and constitutive mCherry.

Special Characteristics:	The RevCEM-E7 clone (cat# 13435) was infected with a lentivirus constitutively expressing mCherry under a human EF1alpha 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 NL4-3 and clones were scanned by microscopy to find clones which maintained similar GFP expression to the parental RevCEM-E7 clone. The clone G2 was 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. 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 Boulle, 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-G2 Cells from Dr. Alex Sigal (cat# 13436)." Also include the references cited above in any publications.
Last Updated	May 15, 2020