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DATA SHEET

Reagent:	Jurkat HIV-1 LTR-luciferase Cells (1G5)
Catalog Number:	1819
Lot Number:	110020
Release Category:	C
Provided:	4 x 10^6 cells/mL. Viability 66%.
Cell Type:	Jurkat derivative.
Propagation Medium:	RPMI 1640, 90%; fetal bovine serum, 10%.
Freeze Medium:	RPMI 1640, 72.5%; fetal bovine serum, 20%; DMSO, 7.5%.
Growth Characteristics:	This cell line can be difficult to grow. Viability tends to start low and will drop a few days after initial culture. Keep cells slightly crowded until the culture recovers. This may take a week or more. 1G5 cells should be maintained at 1 x 10^6 cells/ml. Doubling time is approximately 24 hours. Split 1:10 every five days. The cells grow in suspension as single cells or small clumps. The suggested medium for 1G5 cells is RPMI with 10% fetal bovine serum; however, 1G5 cells have also been grown in RPMI with 5% fetal bovine serum and DMEM with 10% fetal bovine serum without appreciable change in their characteristics.
Morphology:	Characteristic T cell appearance; round, refractile with smooth edges.
Sterility:	Negative for bacteria, fungi, and mycoplasma.
Description:	1G5 Cells are a Jurkat derivative containing two copies of a stably integrated HIV-LTR-luciferase (firefly) construct.

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:	Cells were selected for low basal luciferase activity, HIV infectability, high responsiveness to *tat* expression, and high responsiveness to T-cell activation signals. Conditions can be established for quantitative analysis of LTR(HIV)-luciferase response to each of these conditions. A 10-1000-fold increase in luciferase activity can be achieved after transfection or infection of 1G5 with *tat*-expressing vectors or HIV. Equivalent levels of expression have also been detected after stimulation with T cell mitogens and stimulating environmental conditions. When used in conjunction with a tat-expressing vector, 1G5 provides a system for testing potential anti*tat* therapies without the use of live HIV. HIV-TAT DRUG INTERACTION STUDIES USING 1G5 CELLS
Recommended Storage:	Liquid nitrogen.
Contributor:	Dr. Estuardo Aguilar-Cordova and Dr. John Belmont.
References:	Aguilar-Cordova E, Chinen J, Donehower L, Lewis DE, Belmont JW. A sensitive reporter cell line for HIV-1 tat activity, HIV-1 inhibitors, and T cell activation effects. *AIDS Res Hum Retroviruses* **10**:295-301, 1994.
NOTE:	Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: 1G5 from Dr. Estuardo Aguilar-Cordova and Dr. John Belmont." **Commercial requests should be directed to Dr. Aguilar-Cordova (eaguilar@advantagene.com) and the Baylor Licensing Group, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030. Email: blg@bcm.edu, Phone: 713-798-6821, Fax: 713-798-1252. Please reference 1G5 cell line.**
Last Updated	May 01, 2017

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