



NIH AIDS Reagent Program

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DATA SHEET

Reagent:	Jurkat LTR-GFP Cells (JLTRG)
Catalog Number:	11587
Lot Number:	140085
Release Category:	C
Provided:	4.10 x 10 ⁶ cells/mL. Viability, 99%.
Cell Type:	Derived from Jurkat Cells.
Propagation Medium:	RPMI 1640, 10% FBS
Freeze Medium:	50% FBS, 40% RPMI 1640, 10% DMSO
Growth Characteristics:	Cells have a doubling time of 24-48 hrs.
Sterility:	Negative for mycoplasma, bacteria and fungi.
Description:	JLTRG/JLTRG-R5 cells are derived from Jurkat cells, which have been stably transfected with an LTR-GFP construct. In the absence of HIV-1 infection or HIV-1 Tat expression the cells exhibit no GFP expression. JLTRG cells cannot be infected with R5 tropic virus, whereas JLTRG-R5 (Cat #11586) cells express low levels of CCR5 and are thus susceptible to infection with R5 tropic viruses.
Special Characteristics:	JLTRG and JLTRG-R5 (Cat #11586) cells are Jurkat T cell-based reporter cell lines. JLTRG cells express CD4 and CXCR4 whereas JLTRG-R5 cells express both HIV-1 co-receptors, CXCR4 and CCR5 and are derived as a spontaneously occurring sub-clone of JLTRG cells. Both cell lines provide the convenience of using enhanced green fluorescence protein (eGFP) as a direct and quantitative marker of HIV-1 infection or HIV-1 Tat expression.

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.

Expression of both CD4 and CXCR4 confirmed by FACS, 98.4%.

Recommended Storage:

Liquid Nitrogen

Contributor:

Dr. Olaf Kutsch

References:

Ochsenbauer-Jambor, C., Jones, J., Heil, M., Zammit, K. P., & Kutsch, O. (2006). T-cell line for HIV drug screening using EGFP as a quantitative marker of HIV-1 replication. *Biotechniques*, 40(1), 91-100. [PUBMED](#)

Kutsch, O., Levy, D. N., Bates, P. J., Decker, J., Kosloff, B. R., Shaw, G. M., . . . Benveniste, E. N. (2004). Bis-anthracycline antibiotics inhibit human immunodeficiency virus type 1 transcription. *Antimicrob Agents Chemother*, 48(5), 1652-1663. [PUBMED](#)

NOTE:

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: Jurkat LTR-GFP Cells (JLTRG)(Cat #11587), from Dr. Olaf Kutsch." Also include the reference cited above in any publications.

Scientists at for-profit institutions or who intend commercial use of this reagent must contact William S. White, The UAB Research Foundation, 701 20th Street South, AB 770, Birmingham AL 35294, 205/934-9911 before the reagent can be released.

Last Updated

February 01, 2017

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