



NIH AIDS Reagent Program

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DATA SHEET

Reagent:	Jurkat LTR-GFP CCR5+ Cells (JLTRG-R5)
Catalog Number:	11586
Lot Number:	170003
Release Category:	C
Provided:	1 mL of cells Post thaw cell count = 3.6×10^6 cells/mL Post thaw cell viability = 82% Cell viability increased to 91% after 5 days in culture.
Cell Type:	Derived from Jurkat Cells (T lymphocyte)
Propagation Medium:	RPMI 1640, 90%; fetal bovine serum, 10%
Freeze Medium:	RPMI, 40%; fetal bovine serum, 50%; DMSO, 10%
Growth Characteristics:	Cells have a doubling time of 24-48 hrs.
Morphology:	Suspension cell line, lymphoblast
Sterility:	Negative for mycoplasma, bacteria and fungi
Description:	Jurkat LTR-GFP CCR5+ Cells (JLTRG-R5) is a T-cell based reporter cell line expressing CCR5. JLTRG-R5 is a spontaneously occurring sub-clone of JLTRG cells (cat# 11587). The JLTRG cell line was produced by stably transfecting Jurkat cells with a LTR-GFP construct. In the absence of HIV-1 infection or HIV-1 Tat expression the cells will not exhibit GFP 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.

Special Characteristics: JLTRG cells (cat# 11587) express CD4 and CXCR4 cannot be infected with R5 tropic viruses. Whereas, JLTRG-R5 cells express both HIV-1 co-receptors, CXCR4 and CCR5 and are susceptible to infection with R5 tropic viruses

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.

Recommended Storage: Keep the reagent in liquid nitrogen.

Contributor: Dr. Olaf Kutsch

References: 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](#)

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](#)

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 CCR5+ Cells (JLTRG-R5), 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: Dugald Hall, The UAB Research Foundation, 701 20th Street South, AB 770, Birmingham, AL 35294, 205/996-7578, dhall@uab.edu before the reagent can be released.

Last Updated November 19, 2020

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