



NIH AIDS Reagent Program

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DATA SHEET

Reagent: Jurkat LTR-GFP Cells (JLTRG)

Catalog Number: 11587

Lot Number: 110064

Release Category: C

Provided: 4.5 x 10⁶ cells/mL. Viability, 95%.

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.

Expression of both CD4 and CXCR4 confirmed by FACS. 20-40%

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 KP, Kutsch O. T-cell line for HIV drug screening using EGFP as a quantitative marker of HIV-1 replication. *Biotechniques*. 2006 Jan;40(1):91-100.

Kutsch O, Levy DN, Bates PJ, Decker J, Kosloff BR, Shaw GM, Priebe W, Benveniste EN. Bis-anthracycline antibiotics inhibit human immunodeficiency virus type 1 transcription. *Antimicrob Agents Chemother*. 2004 May;48(5):1652-63.

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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