



NIH AIDS Reagent Program

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DATA SHEET

Reagent:	GHOST (3) CXCR4+CCR5+ Cells
Catalog Number:	3942
Lot Number:	120237
Release Category:	C
Provided:	4.8 x 10 ⁶ cell/mL, viability 77%.
Cell Type:	HOS (human osteosarcoma) cells
Propagation Medium:	High glucose DMEM, 90%; fetal bovine serum, 10%. Supplement with 500 µg/ml G418, 100 µg/ml hygromycin, pen/strep, and 1 µg/ml puromycin [NOTE: GHOST (3) Parental Cell Line is puromycin sensitive, do not supplement with puromycin.]
Freeze Medium:	FBS, 90%; DMSO, 10%.
Sterility:	Negative for mycoplasma, bacteria, and fungi.
Description:	The GHOST (3) CXCR4+CCR5+ cells express CD4, CXCR4, and CCR5. The tat-dependent HIV-2 LTR-GFP construct produces GFP in response to infection.
Special Characteristics:	<p>GHOST (3) parental cells are derived from HOS (human osteosarcoma) cells that were stably transduced with a MV7neo-T4 retroviral vector as well as stably cotransfected with a HIV-2 LTR-GFP construct and the CMV IE driving hygro-resistance construct. The GHOST (3) parental cell line was then transduced with retroviral vectors containing various HIV coreceptors. For a full listing, please see Table 1 below.</p> <p><u>GHOST (3) Parent Cell Line:</u> Progenitor cell line used to develop GHOST (3) indicator panel. They are adherent cells.</p> <p><u>GHOST Cell Transformants:</u> Indicator cells for HIV-1, HIV-2, or SIV infection with uncloned, primary isolates, molecular clones, or pseudotyped virus. The puromycin-resistant cells are pools rather than clones for human coreceptor expression. Adherent cells.</p>

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.

[NFNSX timecourse on GHOST \(3\) cells](#)

[Table 1: GHOST \(3\) HIV Indicator Cells](#)

[Protocol: Care and use of GHOST \(3\) HIV indicator cells](#)

Alternate names: GHOST (3) X4/R5

Recommended Storage:

Liquid nitrogen

Contributor:

Dr. Vineet N. KewalRamani and Dr. Dan R. Littman.

References:

Morner A, Bjorndal A, KewalRamani V, Littman DR, Inoue R, Thorstensson R, Fenyo EM, Bjorling E. Primary human immunodeficiency virus type 2 (HIV-2) isolates, like HIV-1 isolates, frequently use CCR5 but show promiscuity in coreceptor usage. *J Virol* **73**:2343-2349, 1999.

NOTE:

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: Ghost(3)X4/R5 from Drs. Vineet N. KewalRamani and Dan R. Littman." Also include the references cited above in any publications.

Patent pending. Scientists at for-profit institutions or who intend commercial use of this reagent must contact the New York University Office of Industrial Liaison at the following email address: abram.goldfinger@nyumc.org

Last Updated

June 25, 2018

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