



NIH AIDS Reagent Program

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DATA SHEET

Reagent:	U87 CD4+CXCR4+ Cells
Catalog Number:	4036
Lot Number:	120142
Release Category:	C
Provided:	1.7 x 10 ⁶ cells/ml and viability is 96%.
Cell Type:	Human astrocytoma (glioblastoma) cells
Propagation Medium:	DMEM, 85%; fetal bovine serum, 15%. Supplement with 1 µg/ml puromycin, 300 µg/ml G418, glutamine, and pen/strep.
Freeze Medium:	Fetal bovine serum, 90%; DMSO, 10%.
Growth Characteristics:	Cells divide slowly; however, they should not be allowed to become over-confluent. In general, pass cells at 80% confluency and split no more than 1:10. Cells are sensitive to acidic medium. Cells can be split with 0.25% trypsin/EDTA.
Sterility:	Negative for bacteria, fungi, and mycoplasma.
Description:	U87MG cells stably transduced to express CD4 and CXCR4.
Special Characteristics:	<p>U87MG cells (cat# 2188) were stably transduced with the MV7neo-T4 retroviral vector and selected for G418 resistance to produce U87 CD4+ Cells (cat# 4031). Cells were subsequently transduced with pBABE-puro-CXCR4 and selected for puromycin resistance. Human CD4 and CXCR4 expression are each directed by the MV7 vector and BABE vector MLV LTR elements, respectively.</p> <p>Can be used for infections with HIV/SIV Env pseudotyped vectors (ex: HIV-luc) or with replication-competent HIV/SIV. U87 cells endogenously express the virus coreceptors GPR1 and Bonzo/STRL33, which can be used by certain SIV and HIV-2 isolates for cell entry. These cells may be contaminated with amphotropic MLV.</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.

Contributor: Dr. HongKui Deng and Dr. Dan Littman.

References: Björndal A, Deng H, Jansson M, Fiore JR, Colognesi C, Karlsson A, Albert J, Scarlatti G, Littman DR, Fenyo EM. Coreceptor usage of primary human immunodeficiency virus type 1 isolates varies according to biological phenotype. *J Virol* **71**:7478–7487, 1997.

NOTE: Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: U87.CD4.CXCR4 from Dr. HongKui Deng and Dr. Dan R. Littman." Also include the reference 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

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