



## NIH AIDS Reagent Program

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### DATA SHEET

<b>Reagent:</b>	TZM-bl/ FcγRIIIa Cells
<b>Catalog Number:</b>	11796
<b>Lot Number:</b>	098236
<b>Release Category:</b>	B
<b>Provided:</b>	2x10 <sup>6</sup> cells.
<b>Cell Type:</b>	HeLa
<b>Propagation Medium:</b>	DMEM (90%), 10% FBS, 0.025M HEPES buffer, 10 µg/mL Gentamicin.
<b>Freeze Medium:</b>	Growth medium, 10% DMSO.
<b>Growth Characteristics:</b>	This is an adherent cell line with no special requirements for thawing and culture. For optional long term culture, the cells may be maintained in propagation medium containing Blasticidin (20 µg/ml). Cells are split 1:10 every 4 days.
<b>Morphology:</b>	Epithelial
<b>Sterility:</b>	Negative for mycoplasma.
<b>Description:</b>	<p>This is a derivative of the TZM-bl cell line, engineered by lentiviral transduction to stably express human FcγRIIIa on the surface. The parent TZM-bl cell line is an engineered HeLa cell clone that expresses human CD4, CCR5 and CXCR4 and contains HIV-1 Tat-regulated reporter genes for firefly luciferase and β-galactosidase (TZM-bl cells, Cat# 8129, AIDS Reagent Program). TZM-bl/FcγRIIIa cells remain highly sensitive to infection with diverse isolates of HIV and SIV.</p> <p><b>PLEASE NOTE: The TZM-bl cell line is contaminated with ecotropic murine leukemia virus, MLV. For additional information please consult the following reference (Takeuchi et. al, 2008).</b></p>

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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:** The parent TZM-bl cell line is an engineered HeLa cell clone that expresses human CD4, CCR5 and CXCR4 and contains HIV-1 Tat-regulated reporter genes for firefly luciferase and  $\beta$ -galactosidase (Cat# 8129). TZM-bl/FcyRIIIa cells remain highly sensitive to infection with diverse isolates of HIV and SIV.

Expression of FcyRIIIa on this cell line facilitates studies of the Fc portion of antibody in mediating HIV-1 neutralization and infection-enhancement in vitro. Optimal sensitivity to infection is achieved by including DEAE-dextran in the medium. The original TZM-bl cell line was found to be infected with an ecotropic murine leukemia virus, but this has had no measurable effect on the outcome of HIV infection and neutralization assays.

**Recommended Storage:** Liquid Nitrogen

**Contributor:** Dr. David Montefiori and Dr. Gabriel Perez

**References:** Perez LG, et al. J. Virol. 83:7397-7410, 2009  
Platt EJ, et al. J. Virol 83: 8289-8292, 2009  
Takeuchi Y, McClure MO, Pizzato M. Identification of gammaretroviruses constitutively released from cell lines used for human immunodeficiency virus research., J Virol. 2008 Dec;82(24):12585-8.

**NOTE:** Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: Cat# 11796, TZM-bl/ FcyRIIIa Cells from Dr. David Montefiori and Dr. Gabriel Perez." Also include the references cited above in any publications.

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