

Centre for AIDS Reagents

Data Sheet

NAME: TZM-bl/ Fc γ RIIIa

REPOSITORY REFERENCE: ARP5031

SPECIES/TYPE: Human/HeLa

DESCRIPTION: This is a derivative of the TZM-bl cell line, engineered by lentiviral transduction to stably express human Fc γ RIIIa 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, NIH AIDS Research and Reference Reagent Program). TZM-bl/Fc γ RIIIa cells remain highly sensitive to infection with diverse isolates of HIV and SIV.

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).

SPECIAL CHARACTERISTICS: Expression of Fc γ RIIIa 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.

CULTURE MEDIUM: DMEM (90%), 10% FBS, 0.025M Hepes buffer, 10 μ g/mL Gentamicin

STORAGE: Liquid nitrogen

SOURCE: Dr. David Montefiori and Dr. Gabriel Perez (Courtesy of the NIH)

REFERENCE: 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.

ACKNOWLEDGEMENTS :

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Please also ensure that you send us a copy of any papers resulting from work using reagents acquired through CFAR (this can be electronically or as a paper copy)