



NIH AIDS Reagent Program

20301 Century Boulevard
Building 6, Suite 200
Germantown, MD 20874
USA

Phone: 240 686 4740
Fax: 301 515 4015
aidsreagent.org

DATA SHEET

Reagent:	HIV-1 HXB2 gp120 Expressing CHO Cells (CHO-WT)
Catalog Number:	2239
Lot Number:	100203C
Release Category:	D
Provided:	1 vial frozen cells, 3×10^6 cells/mL, viability 92%.
Cell Type:	Derived from CHO-K1 cells (ATCC).
Propagation Medium:	See protocol below. In addition to HIV-1 env genes, these cells have been stably transfected with a glutamine synthetase gene. Do not add glutamine to the culture medium, as this may select for cells that do not contain the desired env inserts.
Freeze Medium:	GMEM-S medium without MSX, 60%; fetal bovine serum, 30%; DMSO, 10%.
Growth Characteristics:	Split cells every 3-4 days at 1:12. Cells should just reach confluency on day of passage. Cells are heterogeneous and grow as a flat, adherent monolayer, singly or in clusters.
Sterility:	Negative for bacteria, fungi, and mycoplasma.
Description:	CHO cells transfected to express HXB2 gp120.
Special Characteristics:	CHO-K1 cells were cotransfected with HIV-1 env and rev expression vectors. The HXB2 env gene lacks complete rev and tat genes, and was introduced using the vector pEE14 (Celltech), which expresses glutamine synthetase. The cells are highly fusogenic as monitored by fluorescent dye transfer assays, and readily form visible syncytia with many human CD4+ cells. The extent of syncytium formation varies with the target cells used.

[Table 1. CHO-Cell Lines](#)

[Protocol: Culture and Syncytium Detection Using CHO Env Cell Lines](#)

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.

Recommended Storage: Liquid nitrogen.

Contributor: Dr. Carol Weiss and Dr. Judith White.

References: Weiss, C. D., & White, J. M. (1993). Characterization of stable Chinese hamster ovary cells expressing wild-type, secreted, and glycosylphosphatidylinositol-anchored human immunodeficiency virus type 1 envelope glycoprotein. *J Virol*, 67(12), 7060-7066.
[PUBMED](#)

NOTE: Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: HIV-1 HXB2 gp120 Expressing CHO Cells (CHO-WT) from Dr. Carol Weiss and Dr. Judith White (cat# 2239)." Also include the reference cited above in any publications.

Last Updated July 28, 2020

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.