



NIH AIDS Reagent Program

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DATA SHEET

Reagent:	HIV-1 HXB2 gp120 Secreting CHO Cells (CHO-SEC)
Catalog Number:	2237
Lot Number:	94003
Release Category:	D
Provided:	1 vial frozen cells.
Cell Type:	Chinese hamster ovary cell line derived from CHO-K1 cells (ATCC).
Propagation Medium:	See 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.
Morphology:	Adherent epithelial-like Cell Line
Sterility:	Negative for mycoplasma, bacteria, and fungi
Description:	CHO cells that secrete cleaved and uncleaved HXB2 gp120.
Special Characteristics:	CHO-K1 cells were cotransfected with HIV-1 env and rev expression vectors. The HXB2 env vector was mutated to include a stop codon just after the second amino acid residue before the predicted transmembrane domain, and was inserted into the vector pEE14 (Celltech), which expresses glutamine synthetase. The cells secrete equal amounts of uncleaved and cleaved envelope glycoprotein, on the order of 100 ng/ml supernatant from 5×10^6 cells. CHO-SEC expresses roughly five times more envelope glycoprotein than CHO-WT.

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.

Table 1. CHO-Cell Lines

Protocol: Culture and Syncytium Detection Using CHO-Env Cell Lines

Recommended Storage:

Keep the reagent in liquid nitrogen.

Contributor:

Dr. Carol Weiss and Dr. Judith White.

References:

Weiss, C. D. and 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*, (12), 7060-6. [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 Secreting CHO Cells (CHO-SEC) from Dr. Carol Weiss and Dr. Judith White." Also include the reference cited above in any publications.

Last Updated

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