



## 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

<b>Reagent:</b>	HLCD4-CAT Cells
<b>Catalog Number:</b>	1299
<b>Lot Number:</b>	97090
<b>Release Category:</b>	C
<b>Provided:</b>	1 x 10 <sup>7</sup> cells/vial.
<b>Propagation Medium:</b>	DMEM (4500 mg/L glucose), 90%; fetal bovine serum, 10%.
<b>Freeze Medium:</b>	DMEM, 70%; fetal bovine serum, 20%; DMSO, 10%.
<b>Growth Characteristics:</b>	Split twice weekly 1:3 to 1:5. HLCD4-CAT cells are stable and do not need to be maintained in selection medium. If growth in selection medium is desired, propagation medium containing 500 µg/ml G418 and 250 µg/ml hygromycin should be used.
<b>Sterility:</b>	Negative for bacteria, fungi, and mycoplasma.
<b>Description:</b>	HLCD4-CAT cells are a HeLa derivative that contains stably integrated, silent copies of the HIV-1 LTR promoter linked to the CAT gene.
<b>Special Characteristics:</b>	This cell line was generated by cotransfection of HeLa T4+ cells (catalog #154) with the plasmids pL3CATt <sup>2</sup> and pRSVhygro. Clone HLCD4-CAT was selected in hygromycin for high-level CAT activation after infection by HIV-1. Cocultivation with the Env-producing cell line HL2/3 (catalog #1294) resulted in efficient fusion within 6-12 hours <sup>1</sup> . Upon fusion, Tat produced by the HL2/3 cells activates CAT gene expression in HLCD4-CAT. Fusion efficiency can be quantitated by assaying for CAT gene expression. HLCD4-CAT can be infected by HIV-1, and CAT expression assayed to quantitate the extent of infection. Contains LTR sequences to +80 in the R region. Contains the entire U3 region, but lacks U5 sequences.

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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.

**Recommended Storage:** Liquid nitrogen.

**Contributor:** Dr. Barbara K. Felber and Dr. George N. Pavlakis.

**References:**

<sup>1</sup>Ciminale V, Felber BK, Campbell M, Pavlakis GN. A bioassay for HIV-1 based on Env-CD4 interaction. *AIDS Res Hum Retroviruses* **6**:1281-1287, 1990.

<sup>2</sup>Wright CM, Felber BK, Paskalis H, Pavlakis GN. Expression and Characterization of the trans-activator of HTLV-III/LAV virus. *Science* **234**:988-992, 1986.

**NOTE:** Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: HLCD4-CAT Cells from Dr. Barbara K. Felber and Dr. George N. Pavlakis." Also include the references cited above in any publications.

**Corporate requests should be directed in writing to: B.K. Felber or G.N. Pavlakis, National Cancer Institute, FCRDC, ABL-Basic Research Program, P.O. Box B/Building 539, Room 121, Frederick, Maryland 21702-1201. Phone: (301) 846-1474, FAX (301) 846-5991.**

**Last Updated** July 02, 2018

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