



## NIH AIDS Reagent Program

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### DATA SHEET

<b>Reagent:</b>	CEM-SS Cells
<b>Catalog Number:</b>	776
<b>Lot Number:</b>	130031
<b>Release Category:</b>	C
<b>Provided:</b>	1 mL of cells Cell count= $5 \times 10^6$ cells/mL Cell viability= 91%
<b>Propagation Medium:</b>	RPMI 1640, 89%; fetal bovine serum, 10%; PSN antibiotics (Gibco), 1%
<b>Freeze Medium:</b>	RPMI 1640, 66%; fetal bovine serum, 27%; DMSO, 7%
<b>Growth Characteristics:</b>	These cells double approximately every 1-2 days and grow as a suspension of single or small (3-10 cell) aggregates. The cells are optimally maintained on a rocker platform or roller bottle apparatus and can be split at 1:20 one to two times per week.
<b>Morphology:</b>	Generally a round, individual, slightly refractile cell population that occasionally forms small aggregates as observed under normal culture conditions. Small numbers of individual highly refractile karyocytomegalic cells may also be observed.
<b>Sterility:</b>	Negative for bacteria, mycoplasma, and fungi
<b>Description:</b>	Human T4-lymphoblastoid cell line initially derived by G.E Foley et al. and biologically cloned by P.L. Nara et al.

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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:** These cells have been cloned for both poly-L-lysine induced adherence to microtiter plates and viral-induced syncytial/fusigenic sensitivity following infection with either cell-free or cell-associated HIV-1 and HIV-2. Cells are negative for any virus including human retroviruses as determined by electron microscopy and reverse transcriptase analysis. They can be used for virus production, aspects of HIV-1 cell fusion and molecular biology studies and for the analysis of infectivity, antiviral agents and neutralizing antibodies in the assays referenced below.

[CEM-SS Microtiter Syncytial-Forming Assay](#)

**Recommended Storage:** Keep the reagent in liquid nitrogen. Avoid freeze-thaw cycles as reagent degradation may result.

**Contributor:** Dr. Peter L. Nara

**References:** Foley GE, Lazarus H, Farber S, Uzman BG, Boone BA, McCarthy RE. Continuous culture of human lymphoblasts from peripheral blood of a child with acute leukemia. *Cancer* **18**:522-529, 1965.

Nara PL, Hatch WC, Dunlop NM, Robey WG, Fischinger PJ. Simple, rapid quantitative, syncytium-forming microassay for the detection of human immunodeficiency virus neutralizing antibody. *AIDS Res Hum Retroviruses* **3**:283-302, 1987.

Nara PL, Fischinger PJ. Quantitative infectivity assay for HIV-1 and -2. *Nature* **332**:469-470, 1988.

**NOTE:** Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: CEM-SS Cells from Dr. Peter L. Nara." Please include the references cited above in any publications.

**Available only for non-commercial use. Requests from commercial organizations should be directed to NCI Technology Transfer Center at the following email address: [lauren.nguyen-antczak@nih.gov](mailto:lauren.nguyen-antczak@nih.gov).**

**Last Updated** May 18, 2017

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