

NIH AIDS Reagent Program

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DATA SHEET

Reagent: **CEM-SS Cells**

Catalog Number: 776

Lot Number: 160147

Release Category: С

Provided: 1 mL of cells

Post thaw cell count = 3.9×10^6 cells/mL

Post thaw cell viability = 76%

Cell viability increased to 92% after 3 days in culture.

Propagation Medium:

RPMI 1640, 89%; fetal bovine serum, 10%; PSN antibiotics (Gibco), 1%

Freeze Medium: RPMI 1640, 66%; fetal bovine serum, 27%; DMSO, 7%

Growth

These cells double approximately every 1-2 days and grow as a suspension of single or **Characteristics:** 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.

Morphology: 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.

Sterility: Negative for bacteria, mycoplasma, and fungi

Description: Human CD4-lymphoblastoid cell line

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.

REV: 10/01/2020 Page 1 of 2 Special Characteristics:

The cells were initially derived by G.E Foley et al. and biologically cloned by P.L. Nara et

al.

These cells are sensitive to HIV-1- and HIV-2-induced syncytia formation. 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 Transder Center at the following email

address: lauren.nguyen-antczak@nih.gov.

Last Updated October 01, 2020

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