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DATA SHEET

Reagent:	HOS CD4+ Cells
Catalog Number:	3313
Lot Number:	160072
Release Category:	C
Provided:	1 vial of cells at 7.8×10^6 cells/vial. Post-thaw viability = 99%.
Cell Type:	HOS (osteosarcoma) cells
Propagation Medium:	DMEM, 90%; fetal bovine serum 10%. **NOTE**: CD4 expression decreases with long-term (~ 4 months) culture in the absence of selection. Every few months, the CD4+ cells can be selected for by adding mycophenolic acid (40 µg/ml), xanthine (250 µg/ml), hypoxanthine (13.5 µg/ml), and HEPES (10mM to the propagation medium. If desired, the cells can be maintained continuously in this CD4 selection medium.
Freeze Medium:	DMEM, 70%; fetal bovine serum, 20%; DMSO, 10%.
Growth Characteristics:	Thaw cells quickly at 37°C and immediately place them in 10 mL culture medium. Centrifuge at 400 X g to wash out DMSO, resuspend the cells in 10 ml fresh culture medium, and plate them onto a 10 cm^2 tissue culture dish. Cells normally require a minimum of 3–4 days to recover, but should be checked daily to see if they need to be split. Cells split 1:10 should become confluent after three days. Trypsinize and split at least twice a week; do not allow them to become over confluent. They have a low saturation density.
Morphology:	Adherent, flat cells
Sterility:	Negative for bacteria, fungi, and mycoplasma.
Description:	These are CD4-transformed HOS cells.

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:	HOS CD4+ cells act as a CD4+ control cell line. This cell line does not express chemokine receptors at detectable levels, with the exception of CXCR4, which is expressed at a very low level. CXCR4 expression is not detectable by flow cytometry, but can be detected by PCR, and results in a low level of infection by T-tropic HIV-1. These cells also express the gpt selectable marker gene. Please see cat# 3312-3319 for additional cell lines that are based off this cell line and express various β-chemokine receptors.
Recommended Storage:	Liquid nitrogen.
Contributor:	Dr. Nathaniel Landau, Aaron Diamond AIDS Research Center, The Rockefeller University.
References:	He J, Landau N. Use of a novel human immunodeficiency virus type 1 reporter virus expressing human placental alkaline phosphatase to detect an alternative viral receptor. *J Virol* **69**:4587–4592, 1995. Deng H, Liu R, Ellmeier W, Choe S, Unutmaz D, Burkhart M, Di Marzio P, Marmon S, Sutton RE, Hill CM, Davis CB, Peiper SC, Schall TJ, Littman DR, Landau NR. Identification of a major co-receptor for primary isolates of HIV-1. *Nature* **381**:661–666, 1996.
NOTE:	Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: HOS-CD4 from Dr. Nathaniel Landau." Also include the references cited above in any publications. **Patent pending. Requests from commercial organizations must be directed to the New York University Office of Industrial Liaison at the following email address: sadhana.chitale@nyumc.org.**
Last Updated	May 26, 2017

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