

## **Centre for AIDS Reagents**



## **Data Sheet**

| NAME :                        | HOS-CD4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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| <b>REPOSITORY REFERENCE :</b> | ARP064                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| SPECIES/TYPE :                | CD4-transformed HOS (osteosarcoma) cells that also express the <i>gpt</i> selectable marker gene                                                                                                                                                                                                                                                                                                                                                                                                        |
| SPECIAL CHARACTERISTICS :     | CD4+ control cell line. Adherent, flat cells with low saturation density. 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 FACS, but can be detected by PCR, and results in a low level of infection by T-tropic HIV-1.                                                                                                                                             |
| FREEZE MEDIUM :               | DMEM, 70%; foetal bovine serum, 20%; DMSO, 10%                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| PROPAGATION :                 | DMEM,90%; foetal bovine serum, 10%. <b>NOTE:</b> 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 (40ug/ml), xanthine (250ug/ml), hypoxanthine (13.5ug/ml), and HEPES (10mM to the propagation medium). If desired, the cells can be maintained continuously in this CD4 selection medium.                                                                                     |
| GROWTH CHARACTERISTICS:       | Thaw cells quickly at 37°C and immedeately place them in 10ml culture medium. Centrifuge at 400x g to wash out DMSO. Resuspend the cells in 10ml fresh culture medium, and plate them onto a $10 \text{ cm}^2$ 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 3 days. Trypsinize and split at least twice a week; do not allow them to become overconfluent. |

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| STORAGE :          | Liquid nitrogen                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| STERILITY:         | Negative for bacteria, fungi and mycoplasma.                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| SOURCE :           | Dr Nathaniel Landau, Aaron Diamond AIDS Research Centre,<br>The Rockefeller University.                                                                                                                                                                                                                                                                                                                                                                                                                                |
| REFERENCE :        | He J, Landau N. Use of novel human immunodeficiency virus<br>type 1 reporter virus expressing human placental alkaline<br>phosphatase to detect an alternative viral receptor. <i>J Virol</i><br><b>69</b> :4587-4592, 1995.<br>Deng H, Liu R, Ellmeier W, Choe S, Unutmaz D, Burkhart M, Di<br>Marzio P, Marmon S, Sutton RE, Hill CM, Davis CB, Peiper SC,<br>Schall TJ, Littman DR, Landau NR. Identifiaction of a major co-<br>receptor for primary isolates of HIV-1. <i>Nature</i> <b>381</b> :661-666,<br>1996. |
| ACKNOWLEDGEMENTS : | Publications should acknowledge the donor of the reagent and the<br>Programme EVA Centre for AIDS Reagents. Suggested wording<br>can be found on our website at<br><u>http://www.nibsc.ac.uk/spotlight/aidsreagent/index.html</u> in the<br>"Acknowledgements" section.<br>Please also ensure that you send us a copy of any papers resulting<br>from work using reagents acquired through CFAR (this can be<br>electronically or as a paper copy)                                                                     |