

Data Sheet

NAME: OM-10.1

REPOSITORY REFERENCE: ARP140

CELL TYPE: OM-10.1 was cloned from HL-60 promyelocyte cells which survived an acute HIV-1 infection. These cells express surface myeloid-specific antigens characteristic of parental HL-60 cells and differentiate in response to established agents. Large circular cells with “spiked” cytoplasmic membrane. No syncytia are seen in these infected cells although large multi-nucleated cells are sometimes observed in uninfected HL-60 cultures.

ORIGIN: USA

PROPAGATION MEDIA: RPMI 1640 supplemented with 2.0mM l-glutamine, 100IU/ml penicillin, 100 µg/ml streptomycin, 90%; Heat-inactivated Foetal Calf Serum, 10%.

CHARACTERISTICS: Cloned from HL60 infected with HIV-1. Each cell contains single integrated provirus. Expression can be induced. OM-10.1 cells show minimum, constitutive HIV-1 production and remain CD4+ under normal conditions. HIV-1 expression increases 30-1000-fold 24-72 hours after treatment with TNF- α and 10-20-fold 24-72 hours after treatment with phorbol esters. HIV-1 induction can be monitored by measuring RT activity or by viral antigen ELISA, or, in the case of TNF- α -treated cells, by measuring cell surface CD4 down modulation. Because OM-10.1 cells remain CD4+ until viral activation, superinfection of resting cells will result in background HIV expression. This can be minimised by periodic treatment with 10 µg/ml AZT.

SOURCE: Dr S Butera (courtesy of the NIH AIDS Research and Reference Reagent Program).

REFERENCE: Butera ST et al (1991), J Cell Biochem 45:366-373.

ACKNOWLEDGEMENTS: Publications should acknowledge the donor of the reagent and the Programme EVA Centre for AIDS Reagents. Suggested wording can be found on our website at <http://www.nibsc.ac.uk/spotlight/aidsreagent/index.html> in the “Acknowledgements” section.
Please also ensure that you send us a copy of any papers resulting from work using reagents acquired through CFAR (this can be electronically or as a paper copy)

NOTE: This cell line is described in US Patent 5256534. Requests from commercial organisations should be directed to the National Technical Information Service, Federal Licensing office. Tel (001) 703 487 4732. Alternatively this cell line can be purchased from the American Type Culture Collection (ATCC Catalogue # CRL 10850).