

DATA SHEET

For research use only. Not for use in humans.

Reagent:	Ghost (3) CCR3+ CXCR4+ CCR5+ Cells
Catalog Number:	ARP-3943
Lot Number:	190360
Provided:	Each vial of ARP-3943 contains approximately 5.3×10^6 cells in 0.8 mL of freeze medium. Post-thaw viability was 93%.
Cell Type:	ARP-3943 is a Human Osteosarcoma (HOS) cell line.
Propagation Medium:	The recommended propagation medium is 90% High glucose DMEM supplemented with 10% fetal bovine serum, 500 µg G418, 100 µg/mL hygromycin and 1 µg/mL puromycin.
Freeze Medium:	The recommended freeze medium is Gibco Recovery™ Cell Culture Freezing Medium.
Growth Characteristics:	ARP-3943 cells should be split 1:3 every 2 or three days. Cells are adherent.
Sterility:	Tests for bacteria, fungi and mycoplasma were negative.
Description:	ARP-3943 is a human osteosarcoma cell line that expresses CD4, CCR3, CXCR4 and CCR5. The cell line has a tat-dependent human immunodeficiency virus type 2 (HIV-2) LTR-GFP construct producing GFP in response to HIV infection.
Special Characteristics:	GHOST (3) parental cells are derived from HOS cells that were stably transduced with a MV7neo-T4 retroviral vector as well as stably cotransfected with a HIV-2 LTR-GFP construct and the CMV IE driving hygromycin-resistance construct. GHOST (3) CCR3+ Cells were generated by transduction of the parental cells GHOST (3) (ARP-3679) with the retroviral MLV BABE-puro vector containing the human CCR3 gene. GHOST (3) CCR3+ CXCR4+ CCR5+ Cells were generated by transduction of the GHOST (3) CCR3+ Cells (ARP-3682) with the non-selectable MX-CCR5 and MX-CXCR4 retroviral vectors and sorted for high CCR5 and CXCR4 expression. These cells are HIV indicator cells, and can be used in drug/neutralization studies, determining the phenotypic properties and to titer virus. Information on the available GHOST (3) HIV indicator cells is provided on the BEI Resources webpage. <u>GHOST (3) Parent Cell Line:</u> Progenitor cell line used to develop GHOST (3) indicator panel. <u>GHOST Cell Transformants:</u> Indicator cells for HIV-1, HIV-2, or simian immunodeficiency virus (SIV) infection with uncloned, primary isolates, molecular clones, or pseudotyped virus. The puromycin-resistant cells are pools rather than clones for human coreceptor expression. This cell line was cultured <i>in vitro</i> and the expression of the receptors of interest was confirmed by flow cytometry. Single cells were then individually sorted and propagated, with continued monitoring of expression of key receptors. Despite these efforts, the population remains heterogeneous for expression.
Recommended Storage:	Keep at -100°C or colder, preferably in the vapor phase of a liquid nitrogen freezer.
Contributors:	Dr. Vineet N. KewalRamani and Dr. Dan R. Littman
References:	Morner, A., et al. "Primary Human Immunodeficiency Virus Type 2 (HIV-2) Isolates, Like HIV-1 Isolates, Frequently Use CCR5 but Show Promiscuity in Coreceptor Usage." <i>J Virol.</i> 73 (1999): 2343-2349. PubMed: 9971817.

Citation:	Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Ghost (3) CCR3 ⁺ CXCR4 ⁺ CCR5 ⁺ Cells, ARP-3943."
Biosafety Level: 2	Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories (BMBL). Current Edition. Washington, DC: U.S. Government Printing Office.
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