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# DATA SHEET

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|---|---|
| **Reagent:** | HLfB Cells |
| **Catalog Number:** | 1300 |
| **Lot Number:** | 1 |
| **Release Category:** | C |
| **Provided:** | 4 x $10^6$ cells/vial. |
| **Propagation Medium:** | DMEM (4500 mg/L glucose), 90%; fetal bovine serum, 10%. |
| **Freeze Medium:** | DMEM, 70%; fetal bovine serum, 20%; DMSO, 10%. |
| **Growth Characteristics:** | Split twice weekly 1:10. HLfB cells are stable and do not need to be maintained in selection medium. If growth in selection medium is desired, propagation medium containing 500 µg/ml G418 should be used. The culture flask should be changed every two weeks. |
| **Sterility:** | Negative for bacteria, fungi, and mycoplasma. |
| **Description:** | HLfB cells are a HeLa derivative containing stably integrated copies of fB[2], a rev-deficient HIV-1 HXB2 molecular clone. |
| **Special Characteristics:** | This cell line was generated by cotransfection of HeLa cells with the plasmids fB and pSV2neo. Clone HLfB produces high levels of Gag and Env proteins only in the presence of Rev, and was selected in geneticin (G418). The rev gene can be introduced into HLfB by transfection with a rev plasmid[3], by fusion to a rev-expressing cell line[3], or by fusion to *E. coli* protoplasts containing bacterially-expressed Rev[1]. High levels of virus are produced after introduction of Rev. Morphology is epithelial-like. |
| **Recommended Storage:** | Liquid nitrogen |

**Contributor:** Dr. Barbara K. Felber and Dr. George N. Pavlakis.

**References:**

[1]Mermer B, Felber BK, Campbell M, Pavlakis GN. Identification of trans-dominant HIV-1 rev protein mutants by direct transfer of bacterially produced proteins into human cells. *Nucleic Acids Res* **18:**2037-2043, 1990.

[2]Hadzopoulou-Cladaras M, Felber BK, Cladaras C, Athanassopoulos Tse A, Pavlakis GN. The Rev (Trs/Art) protein of human immunodeficiency virus type 1 affects viral mRNA and protein expression via a cis-acting sequence in the env region. *J Virol* **63**:1265-1274, 1989.

[3]Felber BK, Pavlakis GN. Cell fusion and transfection of HL3Ta and HeLa-tat cell lines. *Courier* **91-01**:8-10, 1991.

Drysdale CM, Pavlakis GN. Rapid activation and subsequent downregulation of the HIV-1 promoter in the presence of Tat: possible mechanisms contributing to latency. *J Virol* **65**:3044-3051, 1991.

Felber BK, Drysdale CM, Pavlakis GN. Feedback regulation of human immunodeficiency virus type 1 expression by the rev protein. *J Virol* **64**:3734-3741, 1990.

**NOTE:** Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: HLfB Cells from Dr. Barbara K. Felber and Dr. George N. Pavlakis." Also include the references cited above in any publications.

**Corporate requests should be directed in writing to: B.K. Felber or G.N. Pavlakis, National Cancer Institute, FCRDC, ABL-Basic Research Program, P.O. Box B/Building 539, Room 121, Frederick, Maryland 21702-1201. Phone: (301) 846-1474, FAX (301) 846-5991.**

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