



NIH AIDS Reagent Program

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DATA SHEET

Reagent: ☒ HIV-1 JR-FL Virus

Catalog Number: 395

Lot Number: 180141

Release Category: C

Provided: 1 mL of cell-free virus
TCID₅₀= 1.46 x 10⁵ TCID₅₀/mL in PBMC cells
p24 = 1,009 ng/mL

Original Source: Frontal lobe brain tissue of a male patient with AIDS dementia and Kaposi sarcoma obtained at autopsy.

Host Strain: Human CD8- PBMCs

Propagation: A protocol to prepare viral stocks is provided by the [LANL HIV Databases](#).

Sterility: Negative for mycoplasma, bacteria and fungi.

Description: A group M, subtype B, HIV-1 virus isolate which utilizes CCR5 co-receptor to infect cells.

Special Characteristics: This virus was isolated from the same patient as HIV-1 JR-CSF (catalog #394), but was found to be phenotypically distinct. Both viruses were found to replicate in peripheral blood lymphocytes, but only HIV-1 JR-FL virus efficiently infect macrophage/monocytes. HIV-1 JR-FL will not replicate in any cell lines tested, including Jurkat, HUT 78 and U937. This virus is weakly cytopathic in PBLs. A few enlarged cells, some with ballooning protrusions, were evident primarily 24-48 hours after the addition of fresh cells to this lot of JR-FL. Host of Choice: Primary human PBL. Also infects primary human mononuclear phagocytes.

Alternate names: JRFL

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.

GenBank Accession number: [U63632](#)

Recommended Storage:

Keep the reagent in liquid nitrogen.

Contributor:

Dr. Irvin S.Y. Chen

References:

Pang, S., H. V. Vinters, T. Akashi, W. A. O'Brien and I. S. Chen. (1991). HIV-1 env sequence variation in brain tissue of patients with AIDS-related neurologic disease. *J Acquir Immune Defic Syndr*, 4(11), 1082-92. [PUBMED](#)

O'Brien, W. A., Y. Koyanagi, A. Namazie, J. Q. Zhao, A. Diagne, K. Idler, J. A. Zack and I. S. Chen. (1990). HIV-1 tropism for mononuclear phagocytes can be determined by regions of gp120 outside the CD4-binding domain. *Nature*, 348(6296), 69-73. doi:10.1038/348069a0 [PUBMED](#)

Koyanagi, Y., W. A. O'Brien, J. Q. Zhao, D. W. Golde, J. C. Gasson and I. S. Chen. (1988). Cytokines alter production of HIV-1 from primary mononuclear phagocytes. *Science*, 241(4873), 1673-5. [PUBMED](#)

Koyanagi, Y., S. Miles, R. T. Mitsuyasu, J. E. Merrill, H. V. Vinters and I. S. Chen. (1987). Dual infection of the central nervous system by AIDS viruses with distinct cellular tropisms. *Science*, 236(4803), 819-22. [PUBMED](#)

NOTE:

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: HIV-1 JR-FL Virus from Dr. Irvin Chen (cat# 395)." Also include the references cited above in any publications.

Scientists at for-profit institutions or who intend commercial use of this reagent must contact the UCLA Tech Transfer Department at the following email address: contracts@tdg.ucla.edu, before the reagent can be released.

Last Updated:

November 18, 2020

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