



## NIH AIDS Reagent Program

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### DATA SHEET

<b>Reagent:</b>	☒ HIV-1 Infected Jurkat Cells (JA2/R7Hyg)
<b>Catalog Number:</b>	2682
<b>Lot Number:</b>	94170
<b>Release Category:</b>	D
<b>Provided:</b>	5 x 10 <sup>6</sup> cells/vial.
<b>Cell Type:</b>	Jurkat cells
<b>Propagation Medium:</b>	RPMI 1640, 90%; heat-inactivated fetal bovine serum, 10%. Supplement with 10 mM HEPES, 2 mM L-glutamine, 50 µM 2-mercaptoethanol, 250 µg/ml G418 (Gibco), 250 µg/ml hygromycin B (Calbiochem).
<b>Freeze Medium:</b>	Fetal bovine serum, 95%; DMSO, 5%.
<b>Growth Characteristics:</b>	Cells grow in suspension if maintained between 2 x 10 <sup>5</sup> and 1.5 x 10 <sup>6</sup> cells/ml. They are readily adapted to 225 ml cell culture flasks for expansion to several liters. The cells grow in the absence of G418 selection, and appear to maintain HLA-A2.1 expression for at least several weeks.
<b>Sterility:</b>	Negative for bacteria and mycoplasma.
<b>Description:</b>	Jurkat cells with an inducible integrated provirus
<b>Special Characteristics:</b>	<p>Jurkat cells were cotransfected with the genetic clone HLA-A2.1 and a neomycin resistance gene, then transfected with plasmid R7hyg, an HIV-1 proviral clone containing a hygromycin resistance gene in place of the HIV-1 nef gene.</p> <p>When grown under hygromycin selection, cells are all positive for p24 antigen by immunofluorescence and continually produce infectious virions. The phenotype is stable for over two years of culture. The cells are lysed by HIV-specific cytotoxic T lymphocytes.</p>

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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.

**Recommended Storage:** Liquid nitrogen.

**Contributor:** Drs. Ted Tsomides, Herman Eisen, Anna Aldovini, and Richard Young.

**References:** Tsomides T, Aldovini A, Johnson RP, Walker BD, Young RA, Eisen HN. Naturally processed viral peptides recognized by cytotoxic T lymphocytes on cells chronically infected by human immunodeficiency virus type 1. *J Exp Med* **180**:1283-1293, 1994.

Irwin MJ, Heath WR, Sherman LA. Species-restricted interactions between CD8 and the  $\alpha 3$  domain of class I influence the magnitude of the xenogeneic response. *J Exp Med* **170**:1091-1101, 1989.

**NOTE:** Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: JA2/R7Hyg from Drs. Ted Tsomides, Herman Eisen, Anna Aldovini, and Richard Young." Please also include the references listed above in any publications.

**Last Updated** July 03, 2018

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