



NIH AIDS Reagent Program

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DATA SHEET

Reagent:	HIV-2 ROD GST-Tat Expression Vector (GST-Tat 2 130R)
Catalog Number:	2360
Lot Number:	95127
Release Category:	B
Provided:	1 vial of ampicillin-resistant, transformed BL21 bacterial cells
Cloning Vector:	pGEX2T or pGEX2TK (Pharmacia)
Description:	<p>See attached Table. These constructs contain full length wild type or mutant HIV-1 (HXB2) or HIV-2 (ROD) tat genes. The clones contain a thrombin proteolytic site between the Schistosoma japonicum glutathione S-transferase (GST) sequence and the tat insert. Tat is expressed as a GST fusion protein. Constructs cloned into the pGEX2TK vector contain the phosphorylation site for the catalytic subunit of camp-dependent heart muscle kinase. GST-Tat fusions in this vector can thus be labeled directly in vitro to high specific activities with (g32P)ATP and commercially available kinase (Sigma).</p> <p>Table. HIV Tat Expression Vectors</p>
Special Characteristics:	<p>The HIV-1 constructs encode Tat in full length (86 aa), first exon (72 aa), activation domain (first 48 aa), or mutated forms. HIV-2 Tat is encoded as full length (130 aa), one exon (99 aa), or mutated protein. The GST-Tat fusion proteins can be easily purified from E. coli lysates using a single-step procedure under non-denaturing conditions (see protocol, page 8). Tat can be cleaved from the fusion proteins and purified by thrombin proteolytic digestion.</p> <p>Protocol: Preparation and Purification of HIV-1/2 Tat</p>
Recommended Storage:	Keep the reagent at -80°C or lower. Avoid freeze-thaw cycles as reagent degradation may result.
Contributor:	Dr. Andrew Rice

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.

References: Herrmann CH, Rice AP. Lentivirus Tat proteins specifically associate with a cellular protein kinase, TAK, that hyperphosphates the carboxyl-terminal domain of the large subunit of RNA polymerase II: candidate for a Tat cofactor. *J Virol* **69**:1612-1620, 1995.

Rhim H, Echetebeu CO, Herrmann CH, Rice AP. Wild type and mutant HIV-1 and HIV-2 Tat proteins expressed in Escherichia coli as fusions with glutathione S-transferase. *J Acquired Immune Defic Syndr* **7**:1116-1121, 1994.

NOTE: Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: GST-Tat 2 130R from Dr. Andrew Rice." 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 Baylor College of Medicine at the following email addresses: mta@bcm.edu and blg@bcm.edu, before the reagent can be released.

Last Updated: July 03, 2018

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