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DATA SHEET

Reagent:	HIV-1 HXB2 GST-Tat Expression Vector (GST-Tat 1 (72R) C22G)
Catalog Number:	2362
Lot Number:	3
Release Category:	B
Provided:	Each clone is provided as 1 vial of ampicillin-resistant, transformed BL21 bacteria.
Cloning Vector:	pGEX2T or pGEX2TK (Pharmacia).
Description:	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). Table. HIV Tat Expression Vectors
Special Characteristics:	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. Protocol: Preparation and Purification of HIV-1/2 Tat
Recommended Storage:	-90°C.
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, Echetebu CO, Herrmann CH, Rice AP. Wild type and mutant HIV-1 and HIV-2 Tat proteins expressed in Escherechia 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: (specify reagent) from Dr. Andrew Rice." Also include the references cited above in any publications.

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