



NIH AIDS Reagent Program

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DATA SHEET

Reagent: HIV-1 IIIB Tat Recombinant Protein

Catalog Number: 2222

Lot Number: 120112

Provided: 25 µg (lyophilized). The protein solution before lyophilization was 0.47 mg/ml in PBS. Reconstitute in water.

Purity: >95%. Purified by heparin-affinity chromatography and reverse phase HPLC.

Description: 86-amino acid Tat protein from IIIB (subtype B), MW: 14,000 by SDS-PAGE.

Special Characteristics: Can be used for *in vitro* transcription at approximately 0.4 µM, and in Western blots at in vivo functional assay has been used to define Tat protein activity. This Tat preparation is also useful in protein binding assays. Because Tat is sensitive to oxidation it should be stored frozen and reconstituted just prior to use. The stability of this preparation when stored in solution is unknown. Production: Produced in *E. coli*. The *tat*-expressing plasmid was provided by the Glaxo Institute for Molecular Biology, Switzerland.

Recommended Storage: -70°C.

Contributor: DAIDS, NIAID (produced by ABL inc).

References:

Ensoli B, Buonaguro L, Barillari G, Fiorelli V, Gendelman R, Morgan RA, Wingfield P, Gallo RC. Release, uptake, and effects of extracellular human immunodeficiency virus type 1 Tat protein on cell growth and viral transactivation. *J Virol.* 1993 Jan; **67**(1):277-87.

Chang HC, Samaniego F, Nair BC, Buonaguro L, Ensoli B. HIV-1 Tat protein exits from cells via a leaderless secretory pathway and binds to extracellular matrix-associated heparan sulfate proteoglycans through its basic region. *AIDS.* 1997 Oct; **11**(12):1421-31.

Bohan CA, Kashanchi F, Ensoli B, Buonaguro L, Boris-Lawrie K, Brady JN. Analysis of Tat transactivation of human immunodeficiency virus transcription *in vitro*. *Gene Expr* **2**:391-408, 1992.

Gutekunst KA, Kashanchi F, Brady JN, Bednarik DP. Transcription of the HIV-1 LTR is

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.

regulated by the density of CpG methylation. *J Acquirea Immune Defic Syndr* **6**:541-549, 1993.

Kashanchi F, Shibata R, Ross EK, Brady JN, Martin MA. Second-site LTR revertants of replication defective HIV: the effect of revertant TATA box motifs on virus infectivity, LTR-directed expression, *in vitro* RNA synthesis and binding of basal transcription factors TFIID and TFIIA. *J Virol* **68**:3298-3307, 1994.

Kashanchi F, Piras G, Radonovich MF, Duvall JF, Chiang C-M, Roeder RG, Brady JN. Interaction of human TFIID with the HIV-1 transactivator Tat. *Nature* **367**:295-299, 1994.

Kashanchi F, Duvall JF, Brady JN. Electroporation of viral transactivator proteins into lymphocyte suspension cells. *Nucleic Acids Res* **20**:4673-4674, 1992.

NOTE:

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: HIV-1 IIIB Tat Recombinant Protein." Also include the appropriate references cited above in any publications.

Last Updated:

March 23, 2016

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