



NIH AIDS Reagent Program

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DATA SHEET

Reagent: HIV-1 IIIB Tat Recombinant Protein

Catalog Number: 2222

Lot Number: 041244

Provided: 25 µg (lyophilized). The protein solution before lyophilization was 1.88 mg/ml in 30% acetonitrile, 0.1% TFA and 10 mM DTT (~ 20 µg of residual DTT after lyophilization). The material is susceptible to oxidation and should be stored in the dark. Reconstitute in PBS containing 1 mg/ml BSA and 0.1 mM DTT, de-aerated by bubbling with helium.

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

Special Characteristics: 86-amino acid Tat protein, MW: 14,000 by SDS-PAGE. 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: Dr John Brady and DAIDS, NIAID.

References: 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 regulated by the density of CpG methylation. *J Acquired 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.

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.

Kashanchi F, Piras G, Radonovich MF, Duvall JF, Chiang C-M, Koeder RG, Brady JN. Interaction of human TFIIID 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 from Dr. John Brady and DAIDS, NIAID." Also include the appropriate references cited above in any publications.

Last Updated:

March 23, 2016

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