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tat

Recombinant HIV-1 TAT Clade-B

Catalog No. CSI15819A **Quantity**: 2 μg

CSI15819B 10 μg CSI15819C 100 μg

Alternate Names: Protein Tat

Description: Human immunodeficiency virus type-1 (HIV-1) regulatory Tat protein plays an essential

role in viral replication (Jones KA, 1994) and infectivity (Arya SK, 1985; Fisher AG, 1986). In addition, during acute infection, Tat is released extracellularly by infected cells (Chang HC, 1997; Ensoli B, 1990) and is taken up by neighboring cells where it transactivates

viral replication (Ensoli B, 1993) and increases virus infectivity.

HIV-1 Tat activates transcription of HIV-1 viral genes by inducing phosphorylation of the C-terminal domain (CTD) of RNA polymerase II (RNAPII). Tat can also disturb cellular metabolism by inhibiting proliferation of antigen-specific T lymphocytes and by inducing cellular apoptosis. Tat-induced apoptosis of T-cells is attributed, in part, to the distortion of microtubules polymerization. LIS1 is a microtubule-associated protein that facilitates

microtubule polymerization.

UniProt ID: Q8UNF8

Source: E. coli

Molecular Mass: 14 kDa (86 aa) monomer

Formulation: Sterile-filtered and lyophilized with 0.1% glycerol.

Purity: > 90.0% as determined by SDS-PAGE.

Biological Activity: Immunoreactive with all sera of HIV-1 infected individuals.

Amino Acid Sequence: MEPVDPRLEP WKHPGSQPKT ACTNCYCKKC CFHCQVCFIT KALGISYGRK

KRRQRRRPPQ GSQTHQVSLS KQPTSQSRGD PTGPKE.

Solubility: It is recommended to reconstitute the lyophilized HIV-1 TAT in sterile deionized water at

> 100µg/ml, which can then be further diluted to other aqueous solutions.

Applications: Recognized by anti-Tat (HIV-1) polyclonal antibody.

Reacts with anti-Tat antibodies from human, monkey, rabbit and mouse serum.

Storage & Stability: Lyophilized HIV-1 TAT although stable at room temperature for 1 week, should be stored

at -20°C to -80°C. Upon reconstitution HIV-1 TAT should be stored at 2-8°C up to 1 week or for longer storage aliquot the stock solution and store at -20°C to -80°C. For long-term storage it is recommended to add a carrier protein such as 0.1% HSA or BSA. **Avoid**

E-mail: info@cellsciences.com

Website: <u>www.cellsciences.com</u>

repeated freeze-thaw cycles.

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Toll Free: 888-769-1246

Phone: 978-572-1070

Fax: 978-992-0298

