

32-5587: Recombinant HIV-1 TAT Clade-B

Description

Source : Escherichia Coli. HIV-1 TAT Recombinant- produced in E.coli is a single, non-glycosylated, polypeptide chain containing 86 amino acids encoded by two exons and having chain having a molecular mass of 14kDa. 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.

Product Info

Amount :	10 µg
Purification :	Greater than 90.0% as determined by HPLC analysis and SDS-PAGE.
Content :	Lyophilized with 0.1% glycerol.
Storage condition :	Lyophilized HIV-1 TAT although stable at room temperature for 1 week, should be stored desiccated below -18°C. Upon reconstitution HIV-1 TAT should be stored at 4°C between 2-7 days and for future use below -18°C. For long-term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.
Amino Acid :	MEPVDPRLEP WKHPGSQPKT ACTNCYCKKC CFHCQVCFIT KALGISYGRK KRRQRRRPPQ GSQTHQVLSL KQPTSQSRGD PTGPKE.

Application Note

It is recommended to reconstitute the lyophilized HIV-1 TAT in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.