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Certificate of Analysis and Data Sheet Recombinant HIV-1 TAT Cys22

Catalog No.
228-10752

Source
Escherichia Coli.

Introduction

Human immunodeficiency virus type-1 (HIV-1) regulatory Tat protein plays an crucial part in viral replication and infectivity. Throughout acute infection, Tat protein is released extracellularly by infected cells and is taken up by neighboring cells where it transactivates viral replication and inhances 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.

Description

HIV-1 TAT Cys22 Recombinant- produced in E.coli is a single, non-glycosylated, polypeptide chain containing 86 amino acids mutated in the trans activation domain and having chain having a molecular mass of 14.4 kDa.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

Lyophilized with 0.1% glycerol.

Solubility

It is recommended to reconstitute the lyophilized HIV-1 TAT Cys 22 in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized HIV-1 TAT Cys22 although stable at room temperature for 1 week, should be stored desiccated below -18°C. Upon reconstitution HIV-1 TAT Cys22 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.

Purity

Greater than 90.0% as determined by SDS-PAGE.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



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Specificity

Immunoreactive with all sera of HIV-1 infected individuals.

Applications

Recognized by anti-Tat (HIV-1) polyclonal antibody. Reacts with anti-Tat antibodies from human, monkey, rabbit and mouse serum.

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