

HIV-1 TAT Clade-C Human Immunodeficiency Virus 1 Antigen recombinant, *E. coli*

Cat. No.	Amount
PR-1206	10 µg

For *in vitro* use only
Quality guaranteed for 12 months
Store at -20°C

Avoid freeze / thaw cycles

Form

Lyophilized with no additives.

Application

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

Specificity

Immuno reactive with all sera of HIV-1 infected individuals.

Solubility

It is recommended to reconstitute the lyophilized HIV-1 TAT in bidest H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Molecular Weight

21 kDa

Purity

>90% by SDS-PAGE and HPLC

Description

HIV-1 TAT Recombinant- produced in *E.coli* is a single, non-glycosylated, polypeptide chain containing 100 amino acids encoded by two exons and having a molecular mass of 21 kDa.

Recombinant HIV-1 TAT is purified by proprietary chromatographic technique.

Background

HIV belongs to the retrovirus family, distinguished by possession of a viral reverse transcriptase that transcribes viral RNA into DNA which is integrated into the host-cell genome.

HIV-1 regulatory Trans-Acting Transcription factor (TAT) plays an essential role in viral replication and infectivity. In addition, during acute infection, TAT is released extracellularly by infected cells and is taken up by neighboring cells where it transactivates viral replication 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. Tat can also disturb cellular metabolism by inhibiting proliferation of antigen-specific T lymphocytes and by inducing cellular apoptosis.

Selected References:

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