

# HIV-1 Tat (02-002): sc-65913

## BACKGROUND

Infection by human immunodeficiency virus (HIV) is associated with an early immune dysfunction and progressive destruction of CD4<sup>+</sup> T lymphocytes. The HIV-induced, premature destruction of lymphocytes is associated with the continuous production of HIV viral proteins, which modulate apoptotic pathways. The HIV-1 Tat protein, also designated Tbp1, is a viral protein that is essential for activation of the HIV genes and plays a critical role in HIV-induced immunodeficiency. Extracellular HIV-1 Tat has been implicated in the development of AIDS and of AIDS-associated pathologies. HIV-1 Tat is associated with chronic immune activation and the continuous induction of apoptotic factors. It can also protect HIV-infected cells from apoptosis by increasing anti-apoptotic proteins and downregulating cell surface receptors recognized by immune system cells. HIV-1 Tat has been shown to have neurotoxic activity and is able to promote certain proinflammatory functions of microglia.

## REFERENCES

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9. Lee, Y.W., Eum, S.Y., Nath, A. and Toborek, M. 2004. Estrogen-mediated protection against HIV Tat protein-induced inflammatory pathways in human vascular endothelial cells. *Cardiovasc. Res.* 63: 139-148.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## SOURCE

HIV-1 Tat (02-002) is a mouse monoclonal antibody raised against a recombinant Tat protein with epitope mapping to amino acids 6-12 of HIV-1 (BH10) origin.

## PRODUCT

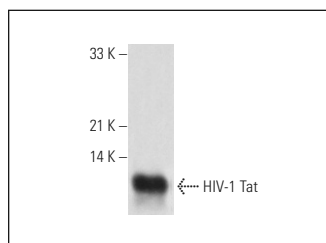
Each vial contains 100 µg IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

HIV-1 Tat (02-002) is recommended for detection of a Tat protein of HIV-1 by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Molecular Weight of HIV-1 Tat: 15 kDa.

## DATA



HIV-1 Tat (02-002): sc-65913. Western blot analysis of viral recombinant HIV-1 Tat.

## SELECT PRODUCT CITATIONS

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## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.