

HIV-1 Tat (02-012): sc-65916

BACKGROUND

Infection by human immunodeficiency virus (HIV) is associated with an early immune dysfunction and progressive destruction of CD4⁺ 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 (02-012) is a mouse monoclonal antibody raised against a recombinant protein corresponding to amino acids 71-81 of Tat of HIV-1 (HAN) origin.

PRODUCT

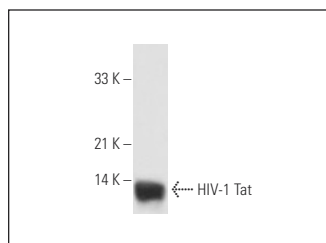
Each vial contains 100 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

HIV-1 Tat (02-012) is recommended for detection of Tat 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 (02-012): sc-65916. Western blot analysis of viral recombinant HIV-1 Tat.

SELECT PRODUCT CITATIONS

1. Khan, N., Lakpa, K.L., Halcrow, P.W., Afghah, Z., Miller, N.M., Geiger, J.D. and Chen, X. 2019. BK channels regulate extracellular Tat-mediated HIV-1 LTR transactivation. *Sci. Rep.* 9: 12285.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.