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

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

SELECT PRODUCT CITATIONS

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.