**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**


**SOURCE**

HIV-1 Tat (02-012) is a mouse monoclonal antibody raised against recombinant Tat protein of HIV-1 (HAN) origin with epitope mapping to amino acids 71-81.

**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 origin 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**

![Western blot analysis of viral recombinant HIV-1 Tat](image)

**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.

**RESEARCH USE**

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