SANTA CRUZ BIOTECHNOLOGY, INC.

HIV-1 Tat-SF1 (N-19): sc-55219

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

HIV-1 Tat-SF1 (HIV-1 Tat-specific factor 1) is a phosphoprotein that plays a role in the process of transcriptional elongation. It is ubiquitously expressed and localizes to the nucleus. HIV-1 Tat-SF1 interacts with Tat, P-TEFb, TFIIF RAP 30, CA150, Spt5, Pol II and U snRNPs. It is structurally similar to CUS2 in yeast. HIV-1 Tat-SF1 contains an acidic C-terminal motif and two RNA recognition motif (RRM) domains that mediate its interaction with U snRNPs. HIV-1 Tat-SF1 forms a complex with U snRNP, thereby coupling transcription and splicing. HIV-1 Tat-SF1 expression is upregulated by the HIV-1 proteins Nef and gp120. It acts as a cofactor for the Tat-enhanced transcription of HIV-1 and is required, along with SPT5, for the activation of Tat. Overexpression of Tat-SF1 and SPT5 stimulates the transcriptional activity of Tat.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HTATSF1 (human) mapping to Xq26.3.

STORAGE

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

SOURCE

HIV-1 Tat-SF1 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HIV-1 Tat-SF1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-55219 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HIV-1 Tat-SF1 (N-19) is recommended for detection of HIV-1 Tat-SF1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for HIV-1 Tat-SF1 siRNA (h): sc-62468, HIV-1 Tat-SF1 shRNA Plasmid (h): sc-62468-SH and HIV-1 Tat-SF1 shRNA (h) Lentiviral Particles: sc-62468-V.

Molecular Weight of HIV-1 Tat-SF1: 140 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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

MONOS Satisfaction Guaranteed

Try **HIV-1 Tat-SF1 (C-4): sc-514351**, our highly recommended monoclonal alternative to HIV-1 Tat-SF1 (N-19).