# SANTA CRUZ BIOTECHNOLOGY, INC.

# HIV-1 Vpr (vN-20): sc-17493



#### 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 virion-associated protein (Vpr) is an accessory protein of HIV. Vpr affects viral replication as well as cell growth, differentiation and apoptosis in vitro. Involved in the pathogenesis of T cell depletion in people infected with HIV, Vpr has been shown to enhance the nuclear transport of the HIV-1 pre-integration complex, activate transcription of cellular and viral promoters, and arrest the cell cycle at the G2/M check-point. The adenovirus-expressed Vpr is distributed in both the cytoplasm and the nucleus. The dual function of Vpr represents a novel mechanism in the complex strategy evolved by HIV to influence the turnover of T lymphocytes leading to either viral persistence or virus release and spreading.

## REFERENCES

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#### SOURCE

HIV-1 Vpr (vN-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Vpr of HIV-1 origin.

# **RESEARCH USE**

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

#### 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-17493 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

HIV-1 Vpr (vN-20) is recommended for detection of Vpr of HIV-1 origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

### **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<sup>™</sup> 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.

## **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 or our catalog for detailed protocols and support products.