SANTA CRUZ BIOTECHNOLOGY, INC.

FIV dUTPase (DU13): sc-73576

BACKGROUND

Feline immunodeficiency virus (FIV) is an elongated lentivirus that is associated with an immune deficiency syndrome in the domestic cat. The feline counterpart of human immunodeficiency virus (HIV), FIV replicates in T lymphocytes and is transported throughout the body by lymph nodes, thus spreading the virus and causing infection. The FIV pol gene encodes several enzymes, namely a protease (PR), a reverse transcriptase (TR), multiple integrase (IN) enzymes and a deoxyuridine triphosphatase (dUTPase), all of which are required for viral replication. FIV dUTPase is essential for accurate replication of cellular DNA and functions in a pH- and ion-dependent manner to convert dUTP (deoxyuridine triphosphate) to dUMP (deoxyuridine monophosphate), thereby producing the necessary substrate (dUMP) for dTTP synthesis. The catalytic activity of FIV dUTPase maintains a low cellular concentration of dUTP, effectively limiting the incorporation of uracil into DNA. Reduced function of FIV dUTPase results in a loss of viral replication stability and may decrease the rate of FIV host infection.

REFERENCES

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SOURCE

FIV dUTPase (DU13) is a mouse monoclonal antibody raised against FIV dUTPase.

PRODUCT

Each vial contains 100 µg IgG_1 in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

FIV dUTPase (DU13) is recommended for detection of FIV dUTPase 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of FIV dUTPase: 14 kDa.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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