BACKGROUND
Human immunodeficiency virus (HIV) is a retrovirus that causes acquired immune deficiency syndrome (AIDS), a condition in humans in which the immune system begins to fail, leading to life-threatening opportunistic infections. HIV mainly infects vital cells in the human immune system such as helper T cells (specifically CD4+ T cells), macrophages and dendritic cells. Two species of HIV infect humans: HIV-1 and HIV-2, with HIV-1 being the more virulent strain. p24 is a viral protein encoded by the HIV-1 GAG gene that provides structural elements of the virus along with p6, p7 and p17. Specifically, p24 makes up the viral capsid, p6 and p7 are the components of the nucleocapsid, and p17 provides a protective matrix.

REFERENCES

SOURCE
HIV-1 p24 (24-4) is a mouse monoclonal antibody raised against HIV-1 p24 Gag.

PRODUCT
Each vial contains 200 µg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

HIV-1 p24 (24-4) is available conjugated to agarose (sc-69728 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-69728 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; and to either phycoerythrin (sc-69728 FITC), Alexa Fluor® 488 (sc-69728 AF488) or Alexa Fluor® 647 (sc-69728 AF647), 200 µg/ml for, IF, IHC(P) and FCM.

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

APPLICATIONS
HIV-1 p24 (24-4) is recommended for detection of Gag p24 of HIV-1 origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10^6 cells).

Molecular Weight of HIV-1 gp24: 20 kDa.

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-ITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA

SELECT PRODUCT CITATIONS

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.