BACKGROUND

Human immunodeficiency virus (HIV) is a retrovirus that causes acquired immune deficiency syndrome (AIDS), a condition in humans in which the immune system fails, 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. p17 is a structural matrix protein of HIV-1 that enters the nucleus shortly after viral synthesis. p17 may transfer viral nucleocapsids from the nucleus to plasma membranes, the location of viral assembly. p17 may also play a role in HIV-1 pathogenesis, since anti-p17 antibodies are used as a serological marker of disease progression, thereby implicating the protein for therapeutic HIV-1 immunizations.

REFERENCES


SOURCE

HIV-1 p17 (17-1) is a mouse monoclonal antibody raised against HIV-1 p17 Gag.

STORAGE

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

PRODUCT

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

HIV-1 p17 (17-1) is available conjugated to agarose (sc-69723 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-69723 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-69723 PE), fluorescein (sc-69723 FITC), Alexa Fluor® 488 (sc-69723 AF488), Alexa Fluor® 546 (sc-69723 AF546), Alexa Fluor® 594 (sc-69723 AF594) or Alexa Fluor® 647 (sc-69723 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-69723 AF680) or Alexa Fluor® 790 (sc-69723 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

HIV-1 p17 (17-1) is recommended for detection of Gag p17 of HIV-1 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 p17: 17 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

DATA

HIV-1 p17 (17-1): sc-69723. Western blot analysis of HIV-1 p17 expression in semi-purified HIV-1 virions.

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.