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.

PRODUCT

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

HIV-1 p17 (17-1) is available conjugated to either phycoerythrin (sc-69723 PE) or fluorescein (sc-69723 FITC), 200 µg/ml, for IF, IHC(P) and FCM.

APPLICATIONS

HIV-1 p17 (17-1) is recommended for detection of Gag p17 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 10⁶ cells).

Molecular Weight of HIV-1 p17: 17 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).

DATA

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

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.