

Anti-HIV-1 p24 antibody

Immunized Animal: Guinea Pig

Polyclonal antiserum

Cat. # 65-006 (50 µl)

Description

HIV-1 Gag p24 is a capsid protein that constitutes the core of AIDS virus HIV-1 and is produced by the digestion of its precursor Gag p55 by HIV-1 protease. This protein is indispensable to the reproduction of AIDS virus and constitutes an essential element for the AIDS virus particle construction (1). As this protein is detectable from the early stage of AIDS virus infection, it is used as a marker for observation of the development in the patient's condition after treatment, as it indicated the amount of virus in the blood.

The product is prepared by immunizing Guinea Pig with recombinant p24 protein which was over-expressed in *E. coli* with a plasmid carrying the Gag p24 coding region of HIV-1 virus, subtype B (2), and highly purified by several steps of chromatography (3, 4).

Using this antiserum in Western blotting, the bands of 24 kD, 55 kD and 41 kD corresponding respectively to HIV-p24 and to its precursors p55 and p41 were observed in the extract of the AIDS virus infected cells (Fig. 1).

Usage

- Use for Western blotting or ELISA for HIV-1 p24 detection and titration.

Specification

Form: 0.09% sodium azide added to the antiserum.

Storage: 4°C

References

1. Freed EO "HIV-1 gag proteins: diverse functions in the virus life cycle" *Virology* 251:1-15 (1998) PMID: 9813197
2. Adachi A et al "Production of acquired immunodeficiency syndrome-associated retrovirus in human and nonhuman cells transfected with an infectious molecular clone" *J Virol* 59: 284 - 291(1986) PMID: 3016298
3. Tanaka N et al "A simple method for overproduction and purification of p24 Gag protein of human immunodeficiency virus type 1" *Microbiol Immunol* 36: 823-831 (1992) PMID: 1474933
4. Saito A et al "Overproduction, purification, and diagnostic use of the recombinant HIV-1 Gag proteins, the precursor protein p55 and the processed products p17, p24, and p15" *Microbiol Immunol* 39:473-483 (1995) PMID: 8569532

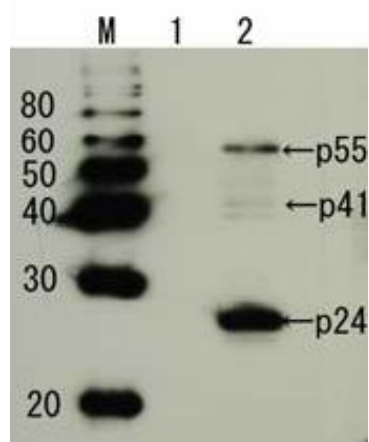


Fig. 1: Detection of HIV-1 p24 and precursor proteins p55 and p 41 by Western blotting using the p24 antibody. Lane 1, Extract of MT4 cells. Lane 2, Extract of MT4 cells infected with HIV-1(LAI strain). The antiserum was diluted 2,500 fold before use.