Anti-HIV-1 p24 antibody, rabbit polyclonal, biotin-conjugated

65-021　　100 μg (Lot.2)

Shipping and Storage: Shipped at 4℃ or -20℃ and store at -20℃

Form: Biotin conjugated IgG (1 mg/ml) in PBS-, 50% glycerol, filter-sterilized. [biotin]/[IgG] = 3.5

Applications

1. Western blotting　2. Immunoprecipitaiton　3. Immunofluorescence staining
4. ELISA　Not tested in other application

Background: HIV-1 Gag p24 is a capsid protein that constitutes the core of AIDS virus HIV-1 and is produced by 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). p24 is used as a marker antigen for observing the patient's condition after treatment, as it indicates the amount of virus in the blood.

The product is prepared by immunizing rabbit 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 was 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 its precursors p55 and p41 were observed in the extract of the AIDS virus infected cells (Fig. 1).

Data Link　GenBank: AAA44988.1

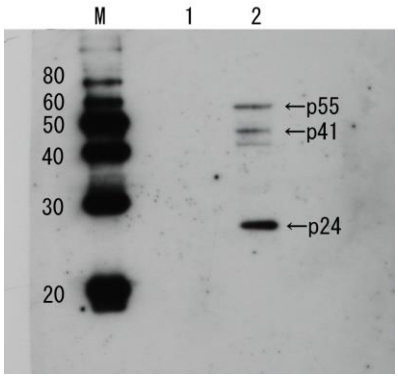

Fig.1 Detection of HIV-1 p24 and precursor proteins p55 and p41 by Western blotting using the anti p24 antibody (unconjugated)).
Lane 1: Extract of MT4 cells
Lane2: Extract of MT4 cells infected with HIV-1(LAI strain). Various precursors of p24 are also detected.
The antiserum was diluted 2,500 fold before use.

References

1.Freed EO "IV-1 gag proteins: diverse functions in the virus life cycle" *Virology* **251**:1-15 (1998) Review PMID: 9813197

2.Adachi A *et al* "Production of acquired immunodeficiency syndrome-associated retrovirus in human 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

Related product: #65-004 anti-HIV1 Gag p24 antibody, rabbit antiserum