

## Anti-HIV-1 p24 antibody, biotin-conjugated IgG (rabbit polyclonal) # 65-021      100 ug

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 correspond respectively to HIV-p24 and its precursors p55 and p41 were observed in the extract of the AIDS virus infected cells (Fig. 1).

This product is a biotinylated IgG ([biotin]/[IgG] = 8.0) produced from the IgG fraction of rabbit anti-p24 serum.

### Applications:

1. Western blot
2. FACS
3. Immunofluorescence staining
4. ELISA

**Form:** Biotin conjugated IgG (0.9 mg/ml) in PBS, 50% glycerol, filter-sterilized.

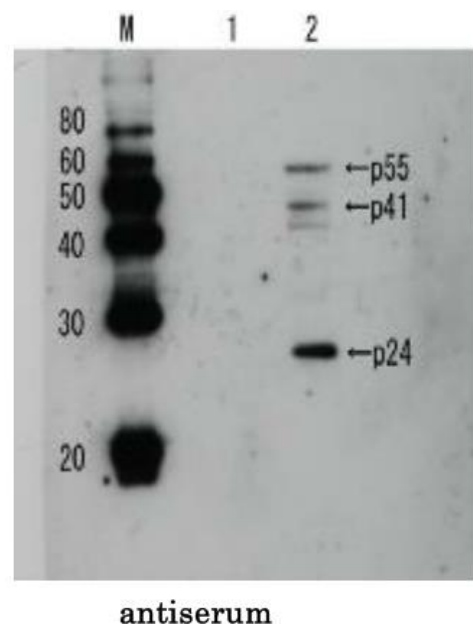
**Storage:** Shipped at 4° or -20°C, and upon arrival, aliquot and store at -20°

**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.

Lane 1: Extract of MT4 cells.

Lane 2: Extract of MT4 cells infected with HIV-1 (LAI strain). Various precursors of p24 are also detected. The antiserum was diluted 2,500 fold.



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**References:**

1. Freed EO "HIV-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