

Anti-HIV-1 p24 antibody, biotin-conjugated IgG (rabbit polyclonal)

65-021 100 ul

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).

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

Applications

- | | | |
|---------------------|---------------------------------|--------------------------------|
| 1. Western blotting | 2. Immunoprecipitation | 3. Immunofluorescence staining |
| 4. ELISA | Not tested in other application | |

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

Storage: Sent at 4°C or -20°C and store at -20°C

Data Link GenBank: [AAA44988.1](http://www.ncbi.nlm.nih.gov/nuccore/AAA44988.1)

References

1. Freed EO "IV-1 gag proteins: diverse functions in the virus life cycle" *Virology* **251**:1-15 (1998) Review PMID: [9813197](https://pubmed.ncbi.nlm.nih.gov/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](https://pubmed.ncbi.nlm.nih.gov/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](https://pubmed.ncbi.nlm.nih.gov/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"

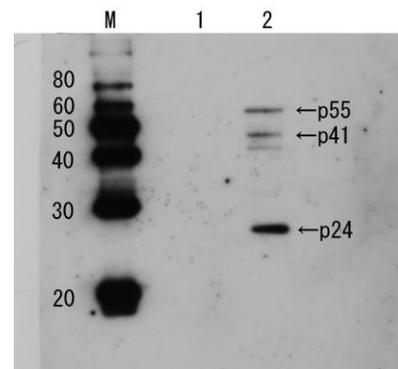


Fig.1 Detection of HIV-1 p24 and precursor proteins p55 and p41 by Western blotting using the anti p24 antibody (unconjugated).

Lane 1: Extract of MT4 cells

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 before use.

Microbiol Immunol **39**:473-483 (1995) PMID: [8569532](#)

Related product: [#65-004](#) anti-HIV1 Gag p24 antibody, rabbit antiserum