



**Catalog No. 65-021EX**

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

**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.

**Size:** 100  $\mu$ L

**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

### **Applications**

1. Western blotting      2. Immunoprecipitation      3. Immunofluorescence staining      4. ELISA

Not tested in other application

**Data Link** GenBank: [AAA44988.1](https://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" *Microbiol Immunol* **39**:473-483 (1995) PMID: [8569532](https://pubmed.ncbi.nlm.nih.gov/8569532/)



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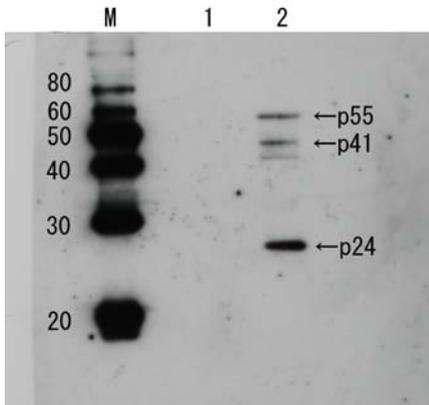


Fig.1 Detection of HIV-1 p24 and precursor proteins p55 and p41 by Western blotting using the anti p24 antibody (unconjugated).

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.

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

*For research use only. Not for clinical diagnosis.*

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