

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

Product code	65-021
Size	100 µg
Storage	-20°C
Concentration	0.9 mg/ml (Lot.1) 1.0mg/ml (Lot.2)
Buffer	PBS- with 50% glycerol
Purity	Purified IgG fraction with protein A from rabbit antiserum
Immunogen	recombinant HIV-1 Gag p24 protein
Isotype	Rabbit IgG
Reactivity	HIV-1 p24 (LAI strain)
Special notes	Conjugation: Biotin [biotin]/[IgG] = 3.5 (Lot.2)
Application	1. Western blotting 2. Immunoprecipitation 3. Immunofluorescence staining 4. ELISA
Background	<p>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.</p> <p>The product is prepared by immunizing rabbit with recombinant p24 protein which was over-expressed in <i>E. coli</i> 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).</p> <p>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).</p>
Data Link	GenBank: AAA44988.1
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

Data Images: 65-021 Anti-HIV-1 Gag p24 antibody, rabbit polyclonal (biotin-conjugated)

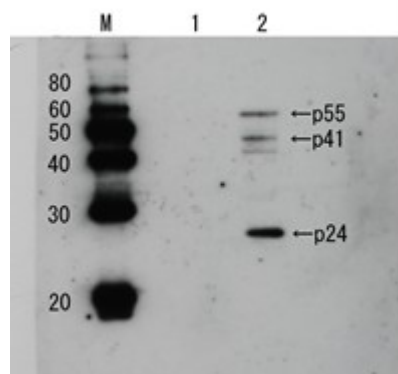


Fig.1 Detection of HIV-1 p24 and precursor proteins p55 and p41 by Western blotting using the anti p24 antibody (unconjugated).

Lane1: Extract of MT4 cells

Lane2: Extract of MT4 cells infected with HIV-1(LAI strain). Various precursors of p24 are also detected.

The antiserum (65-004) was diluted 2,500 fold before use.

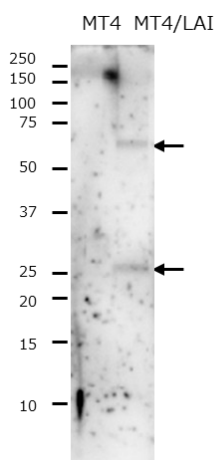


Fig. 2 Detection of p24 antigen by Western blotting using anti-HIV-1 p24 antibody (65-023, unconjugated).

Lane1: Extract of MT4 cells

Lane2: Extract of MT4 cells infected with HIV-1(LAI strain).

Various precursors of p24 are also detected.

1μg/ml anti-HIV-1 p24 antibody (65-023) as primary antibody.

Reference:

- 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 Gagproteins, the precursor protein p55 and the processed products p17, p24, and p15" *Microbiol Immunol* **39**:473-483 (1995) PMID: [8569532](#)

Related product:

05-005 HIV-1 Gag p24

65-004 Anti-HIV-1 Gag p24 antibody, rabbit antiserum

65-023 Anti-HIV-1 Gag p24 antibody, rabbit polyclonal