

## Anti-HIV-1 p24 antibody, Guinea Pig serum

65-006 100 ul

HIV-1 Gag p24 is a capsid protein that constitutes the core of AIDS virus HIV-1 and is produced by the 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). As this protein is detectable from the early stage of AIDS virus infection, it is used as a marker for observation of the patient's condition after treatment, as it indicates the amount of virus in the blood.

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).

### Applications

1. Western blot (1/2,000~1/5000)
2. Dot blot (assay dependent)
3. Immunoprecipitation (assay dependent)
4. ELISA (assay dependent)

Other applications have not been tested.

**Immunogen:** Purified full-size recombinant Gag p24 of HIV-1 subtype B (Ref 2) expressed in *E. coli* (Ref 2,3)

**Form:** 0.09% sodium azide added to the antiserum

**Storage:** Sent at 4°C and upon receipt, aliquot and store at -20

**Data Link** GenBank: [AAA44988.1](https://www.ncbi.nlm.nih.gov/nucl/AAA44988.1)

### References

1. Freed EO "HIV-1 gag proteins: diverse functions in the virus life cycle" *Virology* **251**:1-15 (1998) PMID: [9813197](https://pubmed.ncbi.nlm.nih.gov/9813197/)
2. Adachi A *et al* "Production of acquired immunodeficiency syndrome-associated retrovirus in human and 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/)

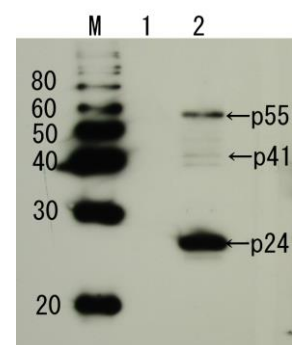


Fig.1 Detection of HIV-1 p24 and precursor proteins p55 and p41 by Western blotting using the anti-p24 antibody.

Lane 1: Extract of MT4 cells

Lane 2: Extract of MT4 cells infected with HIV-1(LAI strain).

The antiserum was diluted 2,500 fold before use.