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

References
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
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-HIV Gag p24 antibody, rabbit antiserum