

HIV-1 Gag p17

Cat. # 05-003 (20 µg) ; 05-004 (100 µg)

Description

HIV-1 Gag p17 is the matrix protein of HIV-1 virus and is processed by the digestion of its precursor Gag p55 by HIV-1 protease. This protein is indispensable to the reproduction of AIDS virus and constitute the essential element of the of AIDS virus particle construction (1).

The product is over-expressed as a recombinant protein in *E. coli* with a plasmid carrying the Gag p17 coding region of HIV-1 virus, subtype B (2), and highly purified by several steps of chromatography (3). Its molecular weight is 17 kD, same as that of p17 purified from HIV viral particles (Fig 1).

Usage

- It can be used as p17 antigen in detection of anti-HIV-1 p17 antibody in Western blotting or ELISA.
- It can be used as standard for the quantitative analysis of HIV-1 p17 antigen.
- It can be used in studies of structure and function of HIV-1 as matrix protein that constitutes HIV-1 core.

Specification

Purity: Over 90% by SDS-PAGE (CBB staining)

Protein concentration: 0.23 mg/ml as measured by BCA method

Form: 50% glycerol, 20mM Tris-HCl (pH7.5), 50mM NaCl, 10mM mercaptoethanol

Storage: -20°C

Reference

1. Freed EO, Virology 251:1-15 (1998) Review
2. Adachi A, et al., J. Virol. 59, 284 (1986)
3. Saito A, et al., Microbiol. Immunol. 39:473-483 (1995)

Fig. 1 : Polyacrylamide gel electrophoresis of HIV-1 p17 protein

