

## HIV-1 Gag p17

Product code	05-003 05-004
Size	20 μg 100 μg
Storage	-20°C
Product Description	This protein was over-expressed as a recombinant protein in <i>E. coli</i> with a plasmid carrying the Gag p17 coding region of HIV-1 virus, subtype B (2), and was highly purified by several steps of chromatography (3). Its molecular weight is 17 kD, same as that of p17 purified from AIDS virus particles (Fig 1).
Concentration	0.5 mg/ml as measured by BCA method
Buffer	50% glycerol, 20mM Tris-HCl (pH7.5), 50mM NaCl, 10mM 2-mercaptoethanol
Purity	Over 90% by SDS-PAGE (CBB staining)
Application	<ol> <li>It can be used as p17 antigen in detection of anti-HIV-1 p17 antibody in Western blotting or ELISA.</li> <li>It can be used as a standard for quantitative analysis of HIV-1 p17 antigen.</li> <li>It can be used in studies of structure and function of AIDS virus as a matrix protein that constitutes HIV-1 core.</li> </ol>
Background	<b>HIV-1 Gag p17</b> is the matrix protein of AIDS virus, HIV-1, and is produced by digestion of its precursor Gag p55 by HIV-1 protease. This protein is indispensable for reproduction of AIDS virus and is essential component of AIDS virus particles (1).
Data Image	Fig.1 Polyacrylamide gel electrophoresis of Fig.1 Polyacrylamide gel electrophoresis of HIV-1 p17 protein
Data Link	GenBank: <u>AAA44988.1</u>
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	



## **References:** 05-003, 05-004 HIV-1 Gag p17

- Freed EO "HIV-1 gag proteins: diverse functions in the virus life cycle." Virology 251:1-15 (1998) PMID: 9813197
- 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: <u>3016298</u>
- 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: <u>8569532</u>

## Related products

65-008 Anti-HIV-1 Gag p17 antibody, rabbit serum 65-026 Anti-HIV-1 Gag p17 antibody, rabbit polyclonal